

NEUROTIC REACTIONS IN PARACHUTISTS

BY JOSEPH G. KEPECS, CAPTAIN, M. C., A. U. S.

Neurotic reactions are among the inevitable hazards of parachute jumping. The neurotic reactions of five parachute jumpers furnished us with an opportunity to elucidate certain psychological processes in the illness. All of these men had completed their basic training and were continuing training in a tropical locale when their symptoms developed.

After his physical and psychological conditioning, to qualify as a parachutist the soldier must have made five jumps. He then wears a special insignia, experiences particular prestige and pride in organization, and as an enlisted man draws fifty dollars a month extra pay. A soldier enlists voluntarily as a parachutist and can be removed from jumping status upon request, though the fear of social opinion and the calls of group morale may dissuade him from this. Refusal to jump after a plane has left the ground is considered a punishable offense, tantamount to disobeying a direct command. Individuals who requested removal from jump status and those who refused to jump from a plane did not come to psychiatric attention, and this paper is not concerned with them.

The cases in general are understandable as war neuroses and traumatic neuroses, but there is in addition a special and specific factor, or traumatic situation, the jump. Ordinarily in group jumping the parachute is opened by the pull of a static line which is attached to the chute cover and hooked to a cable inside the plane. After a fall of about seventy feet this line automatically jerks the cover off and the chute opens. In case of a failure, the jumper can use another chute that he also carries, which may be opened by pulling a rip cord.

The theories of instinct provide two main views of traumatic neuroses. Probably the most generally accepted position now is that 'the conflict between conscience on the one hand and

instinct on the other can be regarded as the central motive around which all clinical manifestations seem to collect' (9). The neurosis tries to solve the conflict by providing an escape from danger in the guise of illness, thus avoiding the reproaches of conscience.

The older psychoanalytic view holds that these neuroses are of libidinal nature, and that the present conflict is fundamentally 'due to the unresolved remnants of their respective infantile conflicts' (2). The traumatic neurosis is thus fitted into the general theory of neuroses; the actual fears take on their meaning in terms of childhood experiences. Traumatic experiences may act as precipitants, as temptations to fulfil repressed and forbidden wishes (perhaps sado-masochistic or passive), and reactivating fears of injury to the body by castration and fears of loss of love. 'The fear of losing one's life, which in these cases [traumatic neuroses] has an apparent objective basis, is built up on anxieties which have no objective basis. These are the anxieties once experienced by the child which now come again to the surface' (3). '. . . what is most characteristic in the reaction of the ego to the trauma is that the associative connections are immediately established between the trauma and the infantile conflicts, which become activated, and the old infantile threats and emotions suddenly reacquire a serious character' (4). To the basic fears of castration and deprivation of love Schilder adds: loss of equilibrium, danger to food supply, fear of mutilation, dismemberment and loss of the inside of the body, and finally, the fear of death itself, in which is included the fear of loss of motility. In relation to falling and jumping his views are particularly relevant: 'Anxiety is a phenomenon which may originate from experiences of very different types. In the earliest stages of its development the child is threatened particularly by the loss of equilibrium and by the physical forces of gravitation. Only gradually does it learn to orientate itself in space and to appreciate the definite importance of the vertical and horizontal directions. It is very probable that at this stage of development the love object represents, among other things, an insurance

against the danger of falling . . . a supporting figure' (11). The development of independence in a child includes, therefore, freeing himself from antigravitational support by others. Great danger to an individual's security in space will result in a recrudescence of passive, dependent wishes.

In his book on war neuroses Kardiner emphasizes the part played by failure of the ego's powers of adaptation. 'The traumatic neurosis is the record of the lasting consequences of an abrupt change in the external environment to which the resources of the individual are unequal. This situation we designated as trauma. The neurosis is, therefore, the record of the disturbance created by the trauma on the previously established adaptations. Secondly, it is the record of persistent and unrelenting attempts at restitution' (7). Kardiner discards the operational concept of instinct as inutile, especially in the analysis of ego disturbances, and substitutes for it the concept of 'action syndrome' by means of which activity is structurally analyzed in terms of reception, coördination and effection, analogous to the reflex arc. As Kardiner states, his point of departure is Freud's idea (1921) that a severe accident traumatizes the psyche by overwhelming the normal defense against stimuli, resulting in a flooding of the psychic apparatus with uncontrolled excitation. The neurosis consists of this breakthrough and the subsequent attempts to master it.

These theoretical approaches are not of necessity mutually exclusive, for they apply in varying degree to different aspects of the clinical picture of traumatic neurosis.

To obtain some depth of insight into these cases in a brief time, in addition to a history and ordinary interviews, discussion and association under hypnosis or in a hypnoidal state were utilized. Material brought out under hypnosis, though not specifically indicated below, usually represents several sessions. Also employed were fantasies elicited in response to the ten cards of the first series of pictures used in the Murray Thematic Apperception Test. In response to these cards, on each of which is a selected picture, the patient is asked to make up a story, using his imagination freely. The work of Mas-

serman and Balken indicates that ' . . . if we apply to the material the psychoanalytic concepts relating to the structure of dreams and fantasies we may also infer that the stories will denote in disguised, symbolic form the desires, urges, repressions and conflicts which more or less consciously determine the patient's feeling and thinking' (8). Though, for various reasons, the productions obtained are not as rich as those described by Masserman and Balken, they are of value in helping to complete certain aspects of the clinical picture, in confirming some conclusions and in giving leads for further investigation.

Case 1: A tall slender man of twenty-four was brought to the hospital in a state of acute terror. His pupils were dilated, his heart racing and pounding violently. He had a coarse, partly controllable tremor of the jaw and an intention tremor of the hands. His corneal and pharyngeal reflexes were absent; there was tenderness about the left nipple. He responded readily to reassurance and stated that he drank to relieve tension. The previous evening he had had over a pint of whiskey. 'When I awoke in the morning I had a hangover. About 9 A.M. in class I felt a sort of fading away, like my heart was getting weak; like a tightening in on my side. I went over to the dispensary. Shortly after I got there I felt like a sudden electric shock in my heart. I lay down with my arms drawn up on my chest. The muscles of my face seemed to be tightening up too. After that I don't remember till I got here. . . . While I was starting to come out of it I began to shake; the muscles of my arms and chest shook. My face felt funny, numb. . . . My arms felt numb too. That was before I started to shake. When I shook the feeling came back gradually. I wasn't scared at first. I thought something was wrong with my heart, but didn't get scared till I got to the dispensary. I thought it was serious then—so tight I couldn't breathe; thought I was going to die.' This anxiety attack was apparently precipitated in a class during a discussion of the different types of transport planes which are used in carrying paratroopers, and occurred in an individual who was 'sweating out' the coming of his next jump.

Several factors combined to arouse his fears. On an early jump in this area, he had trouble opening his chute. Fears of landing on his back and being paralyzed were present, accentuated by an incident in which another jumper on landing was 'awful close

to paralyzed'. A jump fatality two months previously made his fears worse. He believed, however, that his fears had been building up since he began jumping. During the past month or two he had been unable to sleep for several nights before a scheduled jump. Several times in the plane he could hardly get his legs to carry him to the door and he 'almost refused'. During the past six months, when he made a landing, he would shake all over for fifteen or twenty minutes. 'I never had much fear of being killed, but I feared being crippled, like a back injury, or breaking both legs so bad they couldn't be fixed up. The first time I really felt fear I looked at the ground and thought, what if I got all crippled up?'

Under hypnosis (which was profound and readily produced) he had numerous associations to the injury he feared. These included recollection of an uncle whose back was injured when the patient was five years old. 'He could only move his head. He wasn't able to move and seemed to be in pain. His face looked sad.' He said this sight shocked him. When he was eight he saw some paralyzed children in an orthopedic hospital. 'Some could move just the head, and had to be fed. I hate that worse than anything because I'd be helpless to do anything for myself.' The children 'looked to be suffering very much; they couldn't live long. At the time I thought it was painful. Later on I knew it wasn't but still had a fear of it.' He mentioned the death of his older brother in a train accident some years ago. The brother was unconscious and unable to move and the patient was particularly impressed that 'nobody could do anything for him, like the paralyzed people'. His earliest recollection of this sort, which he brought out with great effort, he placed at the age of three. A neighbor was injured in a train wreck, and the patient accompanied his mother when she visited the dying man. 'It made a big impression. . . . He looked in great pain and couldn't move.' He also recalled the deaths of two grandparents. Neither could move. The dominant note in all these memories is helplessness, pain, loss of motility.

In describing the acute symptoms which led to his hospitalization, he said that he felt his heart 'in a vise', like a heart attack, and his arms, face and neck muscles drawing up. He was unable to move the remainder of his body. The drawn up arms reminded him of the paralyzed children who were drawn up that way. It

was also associated with the position of the arms, folded across the chest, used by parachutists in jumping. He recollected his maternal aunt's heart attacks, which he had seen when very young. 'She finally died of them. They scared me pretty bad. She'd gasp for breath and clutch her heart, and be in bed for days afterward.' When asked to show how she clutched her heart, he repeated the drawn up position of the arms.

After discussing these recollections and recognizing how they conditioned his symptoms, he gained great and immediate relief from his anxieties. However, he showed increasing resistance to further hypnotic investigation.

The anxiety attack, in addition to being a repetition of reminiscences and perhaps fantasies, was primarily valuable as a means of escaping from an intolerable situation. He originally joined the paratroops to earn more pay to help his family. He was restrained from leaving the organization because he wanted to continue his contribution, and because 'when you quit over there nobody has anything to do with you any more. . . . The desire to stay was stronger than the desire to leave.' He recognized the formerly preconscious thought that if he got sick he would be ordered out of the unit by a medical officer and thus escape condemnation. His fears of (and desires for) passivity in part signify the wish to be too weak and helpless for the demands placed upon him.

This patient is a little above average intelligence, a high school graduate, and with aspirations to be an artist. Closely attached to his family, the duty to help in their economic struggles has been strongly felt. He is devoutly religious and feels his responsibilities seriously. He has a strong, dominant mother, a 'too easy-going father' and a nonidentical twin brother to whom he was submissive until well into adolescence. He considers himself shy and socially backward. He first had sexual intercourse after entering the army. This has been infrequent, and only with prostitutes. There is no history of marked overt neurotic traits, and while he appears to have a superficially placid, calm disposition, he says he really withholds the expression of his feelings. He has strong passive wishes, but by force of conscience and circumstances has been forced to be active. His earliest (nonhypnotic) recollection, a pleasant one, is of receiving Christmas presents.

The fantasies elicited by the Murray Test pictures indicate a marked repression and holding in of aggressive feelings. There

is a constant attempt to gloss over and avoid recognition of danger, and an inability to express himself without leaving a line of retreat. There are many qualifications and a tendency to make everything 'come out all right'. There is definite identification of himself with a feminine figure in one of the pictures, No. 2, in which a young girl with artistic aspirations and dissatisfied with home, reminded him of himself. In another card (No. 6m), a figure usually considered masculine is interpreted as a girl who has murdered her boy friend. This change in sex probably serves to disguise his aggressive feelings, and perhaps indicates something of his feeling towards his twin brother. Resentment and rebellion against his mother results in guilt and is finally interpreted as sinful. In No. 3m a young man has done something wrong. His mother disapproves of his gambling and being with the wrong people. At first he resents her interference in his life, but finally he submits. In No. 5 a boy, who was lost or ran away from home, is welcomed back by his father and forgiven. The boy fell in with the wrong crowd, and had left home because his people were too strict with him. He will now lead a 'normal life again'. On questioning, the patient associated this return to normal life with his proposed leaving the parachute corps. Apart from the fantasies, he admitted fears of falling into sin, and described how his mother wept and objected to his departure.

After leaving the paratroops this patient went to another organization on another post. According to a man who knew him well there, he was restless, had difficulty concentrating and drank heavily. In the nine months immediately following his transfer out of the parachute organization, he was admitted to X hospital five times because of emotional disturbances. X hospital records show that the most prominent symptom on all these admissions was tachycardia, and his complaints were of 'nerves' and palpitation. It is interesting to note that on one admission, some eight months after he left the paratroops, he complained of a sudden onset of palpitation; his arms and legs felt numb, and his arms were involuntarily semiflexed on his chest, thus exactly duplicating the symptoms of the first anxiety attack leading to hospitalization.

Some of the determinants of the patient's neurotic reaction may be quite definitely recognized. There are strong oral passive desires which he tried to subjugate to the demands of activity toward which he also strives. Joining the army and the dangerous and

vigorous paratroops in order to help his family ('I left home because I figured I was living off them') are attempts at reaching independence and thus overcoming helplessness and weakness. But in the fantasies the boy returning home is described as 'better off if he's home with his folks'. The very strong passive desires also manifest themselves in the fears of injury which will render him helpless. This fear represents, apart from the actual dangers of the situation, the unconscious wish for complete oral dependence. (They have to be fed.) The fear of paralysis means the fear of loss of love and support. (Nobody can do anything for you.) Activity is equated with hostility, and abandoning it and returning to normal life means escaping guilt and anxiety by eschewing desires to revolt and free himself, which are thought of as sinful. Through emotional illness this patient tries to escape fear and the demands of his conscience, thus to achieve some of the dependence he so much desires. However, the recurrence of symptoms and persistence in heavy drinking after leaving the paratroops indicates that this change did not solve the conflict.

Case 2: A man, aged twenty-four, joined the paratroops approximately eighteen months before admission to the hospital. He had made seventeen jumps and felt something was bothering him, but 'knew it wasn't jumping'. He had been in the army nearly two years when he joined the paratroops because he 'always wanted to jump'.

Two years before he was treated for high blood pressure. (This is now normal.) For a year and a half he had been waking up at night two or three times a week, terrified, smothering, but all symptoms became much worse in the three months prior to admission; anxiety attacks occurred nightly and were always more severe the night after a jump. For several years he had frequent dreams of being about to fall. 'Like I'm on a cliff or house and about to fall off. I always wake up scared.' On awaking his head started to pound and he could not see for half a minute. His eyes felt as if they were 'drawing shut' and he feared he was going blind. On awaking from such dreams he wanted to cling to something and found his fists gripped tightly. He becomes frightened on high buildings and doesn't want to let go but 'jumping doesn't bother me a bit'. Before a jump he always has the thought that the chute might not open. His worst accident in seventeen jumps was a bruised hip.

The patient was a rather shy, shut-in individual, who worked on his father's farm until a desire to emulate an older brother led him to join the army. He is closely attached to his mother, a nervous, jumpy individual. He was told that as a baby he cried more than his brothers and sisters. He is not overly aggressive and is rather solitary. He has no close pals, rarely goes to town, and does not drink. His sexual life has been meager, and he does not greatly care for sexual relations.

An attempt to induce hypnosis produced what he afterward claimed was 'just like other spells I had'. He immediately became agitated, groaned and breathed very rapidly. His chest felt 'asleep all over'. 'Seems like something would happen if I breathed the way I wanted to.' 'Something will happen, I don't know what. I don't want to find out what it is.' Asked if it was death he said 'yes'. 'I don't want to be standing up; I want to be lying down or sitting.' During the spells he feels that if he stands up he will die. 'If I try to stand up my eyes get to jerking, I get weak, and blood comes to my head. Seems like I'll go blind if I stand up.' Everything appeared to be going round and round, 'coming up at me'. 'I try to keep them closed; I don't want to keep them open; I'm scared that I can't see or something. Seems like I want to see what I'm doing or where I'm going.' He jerked his body, groaned and panted. 'I see everything, tanks and water, all in a whirl. It keeps pounding; something dripping off [my heart], drip, drip, like that—gets faster and slower.' 'I feel weak, headaches, I feel so tired I can't move. It tires me to breathe. I'm not scared of anything. I dream of falling off something but don't know what it is. I just think of falling; that's all. Got to hold something.' Asked if this was connected with jumping he said: 'I don't think so. It's like I'm pushed off. You don't have to jump.' His body jerked continually, possibly due to hyperventilation. (Respirations 80.) 'When a big gush like goes to my head I feel numb all over.' He opened his eyes reluctantly to end this dramatic episode. During such a spell he feels a warning that he has to do something. Something is saying 'hurry, hurry'. He does not know what is to be done, and is afraid to get up and do it for fear he will be killed. This reminded him of a free jump (in which the jumper pulls the rip-cord himself) where he had to pull the reserve chute cord. At the time he felt on the verge of fainting, and thought 'hurry, hurry'.

On another occasion he was observed lying on his hospital bed, having a 'jerking spell'. He said the thumping in his head made him jerk. His head felt swollen, red, hot, and pulsing. He felt he would be relieved if water came out of his ears. He desired no further hypnotic treatment.

Later he frankly recognized the fear of death behind his symptoms. Behind the fears and dreams of falling he saw the fear of jumping. The smothering attacks were described as 'hands around his throat, choking him'. Upon recognizing the connection of his symptoms with jumping, transfer out of the paratroops was discussed. It was explained to him that he would have to improve or transfer. He asked to be given a few days in which to get better, and during this time the symptoms subsided markedly, and he returned to duty.

The fantasies produced in response to the Murray pictures reveal a general feeling of all-pervading death and destruction, and suggest much hostility directed both inward and outward. There is evidence of a markedly ambivalent attitude toward his home and parents, with rebelliousness as well as strong dependence. The world is regarded as a hostile, threatening place. To card No. 6m he responds: 'Looks like he just got through shooting himself; thought nobody cared about him. . . . I guess he thought everybody was against him, wouldn't pay any attention to him.' In No. 8m the father tells the son who wants to run off and join the army that he might get in trouble—get killed. The son is dubious but goes ahead against his father's advice, because his parents are not good to him. However, by experience the son will learn that leaving home means trouble and jail. The rebellion against the father is punished in picture No. 10 where the hero is having a dream of being operated on and worries he might die from it—'he might not come out from chloroform'.

This patient remained in the paratroops, and seven months later was admitted to X hospital, unconscious. He remained semi-comatose and unresponsive for several days, thrashing about in bed, jerking his shoulders and arms. He developed astasia-abasia and anæsthesia from the waist down. He gradually improved, and his symptoms disappeared under faradization. The attack was not apparently related to jumping, but he gave a vague history of having his money stolen and of trouble with a girl who he thought had poisoned him. A month later he was again admitted

to the same hospital. According to their records he was picked up on a park bench in a 'fit', screaming that a girl had poisoned him. On admission he was again restless and unresponsive and remained semicomatose for two days before he gradually improved. He once more expressed ideas that a native girl had poisoned him and had stolen his watch, but later admitted that the idea of poisoning was imaginary. He was finally diagnosed conversion hysteria and returned to the United States.

It is striking that in spite of his chronic fear of falling, this patient joined the paratroops. He explained his unconscious motives correctly by saying that he had always wanted to jump. It may be that the special circumstances of falling in the paratroops offered enough apparent difference from his fear of heights temporarily to enable his repressed suicidal impulses to obtain some satisfaction. However, the attempt to satisfy these desires led to actual danger and enhanced his fear of his self-destructive drive. In his spells he reënacts his fear of falling, which signifies death. His ambivalence toward his suicidal trends is expressed in this symptom—by means of which he obtains a safe, though symbolic, gratification of his desires, and also evades the real danger to life.

That his symptoms subsided when he was told he would have to get better or leave the organization is at least partially due to the gratification he receives from jumping. His subsequent course, marked by the presence of hysterical symptoms and transitory paranoid manifestations, suggests that the suicidal impulses continued to operate but were fended off by projection, and again received some gratification by a reënactment of death.

Case 3: A paratrooper of twenty-seven was admitted to the hospital to be treated for a gunshot wound in the foot. About a month previously, on his latest jump, he had sustained a blow on the head in landing but was not rendered unconscious. For this injury he had received no treatment except aspirin, and felt that it had deserved more attention. Since this bump he had been having severe headaches which made him nervous and shaky. He stated that while removing ammunition from his gun, coming off guard duty, he accidentally lowered the gun and it went off. He felt that a very severe headache he had had at the time was a factor in the accident.

On the jump which had caused his symptoms, he had trouble

getting out of the plane because it tilted when he came to the door. (He was the last man.) His bayonet caught in the door and he had to make three attempts to clear the door. He was worried because he saw the men who preceded him getting farther and farther away, and he feared he would land in the jungle instead of in a cleared field as planned. Finally he got through the door but his bayonet was torn off in the process. Before he did get out he was told not to jump by an officer in the plane, but he did so nevertheless for fear of what others would think of him if he came down with the plane. While descending he became entangled in his chute in such a way that he was coming in head first instead of feet first, and was unable to prevent his head making the first contact with the ground. Shortly after this jump he was hospitalized for gonorrhœa and was discharged only five days before he shot himself in the foot.

Hypnosis of moderate depth was fairly readily produced and the following material came out in a number of sessions. He began at once to mention feelings of jumpiness and stiffness in his arms, which had begun to bother him three or four days after the accident, and of which he had not complained while awake. The feelings reminded him of various types of civilian work he had done, and of the feeling in his arms while driving in automobile races. It was like the feeling after a narrow escape from an auto accident. 'This last jump I made was rather close, but didn't seem like it at the time—everything happened so doggone fast I didn't know if it was close or not.' An outstanding feeling connected with the jump was his not wanting to land so far away as to get lost from the rest of his outfit. He then recounted how he felt sick and lost on a hike a couple of days after the jump, and how scared he was of the dark as a child, due to an older brother's ghost stories. He said he was concerned with what others would think if he didn't get out of the door of the plane. He noted peculiar feelings in his chest. His right arm and the fourth and fifth fingers of his right hand felt stiff and dead. 'A kind of woody feeling', it reminded him of a smashed finger he had had. Then he said: 'I can feel like a string runs up to my neck from the fingers. . . . It feels kind of stiff and funny when I move it. Feels like it should be stiff like a piece of wood. It feels like when they put stuff in my mouth and pulled some teeth.' He suddenly felt a brief toothache.

His neck and arms felt tired, as if he had been holding them up too long. 'That's what's been bothering me all this time with these headaches. Reminds me of brace rods on a car.' (These run from the axles to the frame to keep the wheels in line.) 'Seems as if the back of my head was braced onto my arms. Feels like if I move my arms my head would move. Feels as if my head would fall forward if my arms relaxed.' In association to this he recalled his uncle telling him he should do white collar work to keep his head up. His arms began to jerk, and it reminded him of the jerking of twine in a farm machine in which he broke his shoulder. He was frightened at that time. He then complained that 'the muscles in the back of my neck are stiff; give me a headache'. His entire body felt stiff, and he had a band-like headache, as if from wearing a helmet. When asked about the connection of the symptoms in his hands with the accident he said: 'Maybe they were tired then. While I was coming down trying to unhook my feet, tangled in the risers, I was trying to raise my body on my hands, to get my feet out . . . I wondered if I'd get hurt. I wasn't exactly scared. I imagine it must have been quite a jar on my arms; the whole weight of my body taken on my arms until my head hit. Now I have that other screwball feeling of muscles holding my head up. I stuck my arms down there to break the fall; coming in faster than usual too.' He then mentioned feelings in his right fifth finger as if it 'was stumped off'. Soon he said 'It's hard to breathe; I can't relax or breathe easy. . . . I imagine I hold my breath before I jump.'

At the movies the previous evening a picture he had seen of parachutists jumping 'gave me a peculiar feeling, like a guy jumping, it took my breath away for a second'. He complained of his neck; it felt as if he had possibly been hit on the neck while wrestling, or as if it had been stretched, bent, put together in sections, one chunk on top of the other. It reminded him of different accidents he had been in. He felt as if the muscles were tangled up in his neck. 'The wrong ones are crossed and rubbing against one another. Like electric wires, maybe jerked out.' At this point he became very untalkative and tried to escape into sleep. 'It's like a whole bunch of ends sticking out, hanging loose; like these wires all jerked out of the place they're supposed to go; like a big board with a whole bunch of tiny wires stuck in this board; like about half pulled out. I might have been dream-

ing that.' 'Like some wires under my eyes, running from the eyes to the back of the head; seems like my neck is all wires, and they are all crossed. Seems like everything comes to my neck . . . looks like a telephone switchboard. If I could get that connected up I could tell you. . . . Seems like somebody came along and cut the wires of the distributor. You could call a guy's head a distributor if you want to. There aren't so many wires now; just have to make a few connections. I can't see the wires now.' After expressing these ideas, he felt much relieved.

During another session when he began to complain of his arms feeling stiff and sore, he was asked if it reminded him of any other part of his body getting stiff and he mentioned erection. He said he had sore stomach muscles from abstinence. 'Sore from having a hard on all night.' He then spontaneously launched into a discussion of his sexual worries. He was upset by a chronic urethral discharge. At first nonspecific, he had to continue coming back for smears. 'It never did quit running until I got clap, and it quit.' 'I guess I thought I'd get run down or something—that I couldn't have children any more. If something happens to your sexual organs you wouldn't be able to reproduce; you wouldn't be able to go off any more. Like an animal without nuts couldn't get a hard on. Maybe in the back of my mind I did think quite a bit about that.' It was suggested to him then that a person might feel hard in some other part of his body and he said: 'My finger has gone to sleep again. It feels like it's dead instead of alive; it feels woody and stiff.' He then admitted that he had the same worry about his penis.

He said his sexual anxieties go back to his girl friend whom he is much afraid of losing. He feels that they could never be happily married without children. The chronic urethral discharge continually reminded him of his fears. A couple of days after his latest jump he was on a hike, and after walking in dampness and through cold water for a couple of hours a heavy discharge began which proved positive. 'I was glad I did have something so I could get in and lay down.' He recalled that the morning of the jump he worried because 'the damn thing' was running. 'I had to change clothes two to three times a day. I couldn't stand the damn stuff.' When asked about fear of injuring his genitals in a jump he said: 'I might have. I think it started to run standing in the plane early in the year. A strap [of the para-

chute harness] squeezed a nut, damned near killed me when the chute opened; I wished I was dead.' He denied fear of injuring the genitals on landing, and says on his last jump he came down wrong end first for that to happen. 'I'm pretty sure in the back of my mind was a fear of getting hurt or I wouldn't have been so interested in landing safe. I believe a fear of mine would be my head—knocked crazy or something. Seems like some guys in the outfit are knocked silly at times.' After this it seemed as if the parts of his body really felt themselves again. 'These are my legs now.' He recognized that this was because one part of the body had been substituting for another.

During another hypnotic session his neck felt 'like something stiff in there—a short piece of wood or something in the middle of the neck in back—like something put in there to keep it stiff, steady. Feels like something set in there to keep my head from falling down.' Neck and head reminded him of a part cut out of wood, all of one piece. The back of his head and neck felt bulged out and this brought to mind several wooden objects he had seen in the past of obviously phallic shape. He then thought of a nocturnal emission he had had the previous night, which was not remembered clearly, except that his dream included the back end of a wagon and his girl friend. His left hand and arm felt dead and he thought of a pitchfork through a man's hand.

The following day he reported a nightmare he had had during the previous night. He was lying in bed with his arms outstretched and a big rat was eating away at his legs. (He pointed to the groin.) There was no pain but he was unable to move and awoke screaming. He then recalled a nightmare he had when he was three or four. He dreamed he fell off a haystack on which he had been playing and knocked a hole in the ground. He saw cattle down in the hole, like in a barn. Then he was down in there and there was a man like a devil there, who said, 'Get the hell out of here'. The patient awoke terrified, and spent the rest of the night with his father for comfort.

The question of leaving the paratroops was discussed with him a couple of times, and welcomed with relief though some slight reluctance. He felt what he termed 'internal nervousness', and that the tension in his arms and neck was relieved, but that they were still somewhat tremulous. His headache was less severe. He was sent to quarters, and seen again on several occasions over a

week later. He had had some teeth extracted in the interim, and after a few painful days felt much better. Under light hypnosis he could only think of being hungry, and then expressed a strong desire to be home—a desire he had been trying to suppress. 'Every time I relax and let go I think about home and I don't want to do it. I dream about home every night. They aren't even crazy dreams. I'm always doing something or coming up on the front porch just like I'm coming home from somewhere all the time. . . . I want to go home so doggone bad; I don't want to think about it because I can't go home I guess.' Dislike of the army and nostalgia were much accentuated since his accident.

The patient was a short man with a rather expressionless face. Always active and restless, he was intelligent with interests predominantly mechanical. He had worked at various construction jobs including bridge building, where the height did not bother him. He had raced in autos. Drafted, he was unenthusiastic about entering the army. He had been a sergeant before he joined the paratroops for more pay and excitement. He had been a corporal in the parachute organization, but after a few days, because of the work, he requested to be relieved of the rank. He drinks moderately. He was much attached to his father who died three years ago. He resented his mother's attempts at interference in his life and left home several times because of her objections to his activities. He is the second of nine siblings, but since 1935 the support of the family has fallen mainly on him, and he did extra work to have some money of his own.

When younger he had many fights, but now has a slowly aroused but strong temper. He left school at fourteen, in the first year of high school. The reason is 'the same thing as the army'. He always hated to take orders. He has had several head injuries from auto wrecks and other accidents. He has never masturbated but has had fairly regular sex activity since the age of fourteen. He has weekly nocturnal emissions usually accompanied by dreams of 'crazy animals I don't recognize' or infrequently of girls, but never to the point of intercourse. His earliest recollection is that while playing with a kiddy-car he was almost run over by an automobile and was much frightened.

The responses to the Murray pictures show fairly conscious and open rebellious and resentful attitudes towards his parents, and probably towards other authorities. He attempts to cover up his

anxieties and unconscious fears by making light of them. He avoids and is uneasy about sexual topics.

This patient was seen again about three months after leaving the paratroops. He was cheerful and did not appear worried or under tension. He said he was very well satisfied because he was now working on a job he liked, mainly taking care of motors. He was putting in long hours and in addition was taking a correspondence course at night, he said, to keep him from thinking too much. As a result he was so tired at bedtime that he immediately fell into a deep dreamless sleep. He was not doing any drinking. His headaches and the urethral discharge had ceased soon after he left the parachute organization.

This man's castration anxiety, already aroused by a chronic urethral discharge and guilt over it, was augmented by a fateful jump in which he struck his head on landing. It is perhaps significant that his bayonet was torn off in making the jump. He developed symptoms related to his arms, head and neck which reproduce the attempts to protect his head in landing, and also symbolize the penis as rigid and dead. The threat of loss is minimized by displacement, and at the same time is denied by symbolic erection. Possibly unconscious factors played a rôle in producing the accident for the purpose of expiation, and to function as a defense against castration fear by substituting another, and to him less dangerous, injury. In like manner his expressions under hypnosis at first dealt directly with the circumstances of the accident and his attempts to protect himself. The castration anxiety only later changed from symbolic to direct expression. It appears that in this case both the accident and the neurosis it produced served as defenses against the underlying castration fear. The subsequent self-inflicted gunshot wound of the foot probably functioned similarly to protect the penis by displacing the injury. The castration danger also served to reactivate wishes for castration in order to remain loved by his father by removing himself as a competitor. The marked relief of his symptoms after extraction of some teeth, points in this direction. In addition to castration anxiety the specific circumstances of the jump aroused fears of being left behind or lost, evoking strong nostalgic feelings that were expressed only after the tooth extraction relieved his guilt.

This individual, unlike any of the other patients reported here, made an excellent adaptation after leaving the paratroops. His

conflict was principally genital, and its main source, the urethral discharge, dried up. The ego conflict, of most prominence in the other cases, was secondary here.

Case 4: A man of twenty-three was admitted to the hospital complaining of weakness, dizziness, and 'dopiness', that began after a head injury sustained in a jump a month previously. He recalled the jump but had no memory of landing or the few minutes immediately afterward. He remembered walking to a truck after a short time and feeling dizzy. He was taken to X hospital where a cerebral concussion was discovered. After a week he left, feeling well. In about ten days he made another jump, his seventh, without any difficulty, but all his symptoms, which had returned slightly on leaving X hospital, became worse. Concerning this jump he said he feared another bump on the head would cause him to lose his mind. Though he had previously enjoyed it, to jump then appeared to him as suicide and he thought of refusing. When he first came to this hospital, his symptoms of dizziness, etc., were believed to be on a post-concussion basis and were treated by rest. However in about three weeks they had cleared up and the prominent complaint was anxiety.

The patient was a tall, well built, tense and restless young man. He has always wanted excitement and thrills and joined the paratroops on this account. Both parents were dead. His father had been easy going and protected him from his mother, who was ill, irritable and demanding. His relations with his only sister were good. On bad terms with one of his brothers, the two did not speak for a year before the brother's death. He has been on bad terms too with another brother, who was twice hospitalized for alcoholic psychosis. He feels that he has always been nervous, and he has had night terrors since childhood. Shy and too restless to stay in one place long, he has been 'on the bum' several times. Of average intelligence, he was at high school two and a half years. He has gone around with girls a good deal and had frequent intercourse. Since being in the army he has visited prostitutes two or three times a month. When he was younger he found some difficulty in satisfying girls sexually. He fears snakes, the jungle, and high places. His fear of heights has been with him a long time. He fears he will fall off, and feels some compulsion to fall or jump.

He said that he worried considerably about jumping after his

accident, but he did not think all his troubles were connected with it. Before the accident he was not especially nervous, but afterward any noise made his stomach tighten up. He felt irritable and became easily angered. He felt like wringing his hands and had frequent nightmares. One dream, recurring several times a night, was of a man with glasses who seemed to be after him. 'Every time he was on top of me I'd wake up in the nick of time. He wouldn't get me.' (His father wore glasses.) Another recurrent dream was of driving a car over a cliff and waking up before it hit.

A rather light degree of hypnosis, but with anæsthesias, was produced. He mentioned waking up frightened, grasping his mosquito bar, and thought that it really was a rope he was trying to grab. To the recurrent dream of driving a car over a cliff he added that there was another man sitting alongside him. Then he recalled an auto accident in which he had been. He was frightened because some girls in the car became hysterical, and because a man was cut up. This brought to mind a bloody accident in which a woman with her tongue cut and her chest crushed died in his arms. He then mentioned the death of his brother in an oxygen tent, that his mother died of dropsy, and how grieved he was by his father's death, which took place when he was away from home. 'I didn't appreciate him until it was too late.' After this he recalled an incident when he was fourteen, in which his mother threw a knife at him in a rage.

He said that a few days after the jump in which he had struck his head, he began to think about the above-mentioned auto accident, and then for the first time began to feel nervous. He recalled several other auto accidents and also an incident in which he cut his leg on a nail. He spoke of being nearly hit by a car while crossing the street as a young child. On another occasion (awake) he said that since the jump mishap he had been thinking of many old accidents, which brought home to him the never before realized danger of jumping.

He expressed resentment over a girl friend being stolen from him, and about his brother taking some of his money, and then said: 'I feel like I had a dirty deal all the way around; losing my folks . . . dying off so sudden, one by one. It burns me up. I think it's a raw break. I feel hatred against the whole world. I don't care who dies or what.' Since the jump he had

been unable to put this feeling out of his mind. 'I don't care if I live or die.' He described how lost he felt when his father died. 'I prayed that he should come and see me. I felt guilty not appreciating him like I should have.'

He was told that he would have to quit jumping, and following this he developed a very strong compulsive craving to jump, and an absence of all fear of it. 'I loved jumping then; I never felt that way about it before.' Under hypnosis he said of this feeling: 'I wanted to jump. I thought I had to jump. I couldn't do without it. . . . I had a craving. . . . I had to have it, that's all. I'd have to do it or probably get mad. . . . Last night if somebody stopped me if I'd had a chance to jump, no telling what I might have done. Right now I'm thinking of how I feel when I really do jump, scary and excited. My cravings for women are pretty bad at times, but this jump craving was worse.' The craving disappeared and his anxieties returned in a few hours.

The fantasy responses to the test pictures were meager, but showed a hostile, revengeful attitude toward women, and some feelings of guilt about sexual matters. He showed anxiety in his responses to two pictures, one of a man in a dark room, looking out of a window, and another of a man seized from behind, which reminded him of his own dreams.

The patient, who had been returned to duty pending transfer out of the paratroops, was seen some months after he left the hospital. On returning to his organization he had been offered the choice of transferring or remaining; he chose to remain, though at times he felt he would be better off elsewhere. Though given jumping status, due to circumstances, he had not jumped since returning to duty. He recognized that he feared jumps more than previously, but he felt he was getting along well enough otherwise. He had frequent anxious dreams of falling, or being bitten on the leg by a dog, and he sometimes awoke from these, screaming. In one recent dream his buddy was going toward some 'horrible grisly place in the jungle, all vines', and the patient was calling him back from terrible danger.

This man, like the second patient, apparently had some original emotional interest in falling. He was able to obtain satisfaction for his desires by parachute jumping, until an accident made it clear that the gratification of unconscious suicidal impulses constituted a real danger to life. For the first time jumping con-

sciously appeared to him as suicide, and the fear this aroused was responsible for his symptoms. The fear of death was also regressively expressed in repetitive dreams of attack, and earlier experiences associated with accidents, injuries and death, were revived. Resentment against fate for losing his family, particularly his father, was related to the feeling of being alone, lack of support, and danger. His deep-seated hostility to the world was one of the sources of the suicidal impulses, which found unconscious expression in jumping. A striking response of a compulsive craving to jump, compared by him to the desire for a woman, but stronger, appeared after he was told he would have to leave the paratroops. Having been actually removed from danger by an external force, the desires could now appear strongly, without the danger that their real gratification implied. Later, returned to a situation in which the threat of jumping was still present, he adjusted with an apparently controllable degree of anxiety, which still continues to be manifest in dreams. As in the second case, the only other one choosing to return to jump status, the gratification he received from jumping was probably a determining factor in his choice.

Case 5: This patient, aged twenty-two, was admitted to the hospital, complaining that his stomach had been bothering him for two months. His difficulties started over four months prior to admission when, during a jump, the top of his chute split open and he came down too fast. He hit hard and was unconscious about half an hour. He was taken to X hospital where the diagnosis of mild concussion and sprained ankle was made. After leaving that hospital he complained of dizziness, twice so severe as to cause him to fall. He was returned to X hospital a little over a month after the injury and his symptoms were relieved following a lumbar puncture. After being discharged he noted that he felt nauseated and would vomit, sometimes spontaneously, but particularly after drinking several beers. The next month he again returned to X hospital where a gastrointestinal series was negative. His gastric symptoms continued unchanged, and generally around bedtime he would notice a dull feeling 'like some of your guts missing'. Shortly before his admission to this hospital he made his thirteenth jump, landed satisfactorily, began walking, and developed abdominal pain. He thought it was appendicitis, but a medical officer told him that it was a muscular strain. His stomach complaints did not abate; he was on sick call regularly

and was told his trouble was nervous indigestion. He thought that his complaint was set down to fear of jumping, but he said that it was not the jumping but the hard work in between, that bothered him. His medical officer suggested that he transfer out of the paratroops and he agreed because 'I figured that I need a change; I was tired of running mostly'. Even though he had decided to make the transfer his abdomen gave him no peace.

Hypnosis, produced fairly readily, was of moderate depth. He complained of restlessness, the need to keep on the move, and the monotony of his routine. He described the onset of his stomach symptoms as follows: he had returned from X hospital and was sitting around with his friends drinking beer; they were bragging about jumping. 'I got disgusted listening to them and drank up my beer pretty fast; I wanted to get upstairs away from them.' He then developed a dull abdominal ache and vomited. For the past two or three months nothing had felt right; he was unable to think right and he had fears of losing his mind. He then complained that 'When I started to talk about how this "talking shop" disturbed me my stomach started to act up'. He suddenly sat up staring, clutching his heart in panic, and asked 'What happened to me?' He was reassured. He mentioned a numb feeling in his hands and legs. Later, he said, when he had opened his eyes everything had looked very bright and the doctor looked chalky white. The feeling was 'like something grabbing me'. He spontaneously mentioned that on going into the plane prior to jumping, his stomach feels empty and 'you feel excited in your body'. He continued to mention being disgusted with things here. 'I remember one time I was disgusted and said "I hope I break my g.d. legs and end in the hospital". They had a big manœuvre coming up and I didn't want to go through with it. I sprained my ankle and hurt my hip, and hurt my head [leading to hospitalization]. . . . Since then everything went wrong with me inside, like something missing or busted in there.' 'It wasn't the jumping, it was the landings I sweated.' The following day he vomited eight times, and after that, reluctantly, and with many rationalizations, he admitted that since the accident there had been a conflict between his pride and sense of duty, and his fear of jumping. He was worried that his parents might not understand why he was leaving the organization.

Following his admission of this conflict his gastrointestinal com-

plaints disappeared, but the same evening he had an anxiety attack, characterized by a feeling that he would pass out, partial syncope and cold sweat. Under hypnosis the following day he said he was disgusted with a movie he had seen prior to the anxiety attack; there was lots of shooting in it. During the night he thought he had heard someone say, 'Get this snake or this alligator out of bed. . . . I thought I heard them looking for it but I guess it was a dream. I guess I dreamed somebody had yelled.' He recalled a childhood dream of being strangled from which he had awakened to find his grandmother putting the covers on his neck. He then mentioned frequent dreams of falling occurring since childhood, and dreams of knives. A recent dream was about 'a kid in my outfit swinging a bolo [long sharp knife] at me, and I remember thinking about keeping out of the way'.

He had no other somatic complaints, though he was still somewhat tense, and he was discharged pending transfer to another organization. Several months later the first sergeant of the organization to which he was transferred, a man who knew him well, said that he appeared very nervous and high-strung there. He drank more than the average and his efficiency was not high. He did not complain of physical ailments or 'ride the sick book'.

The patient was a rather small, compactly built young man, coöperative, alert and intelligent, without overt neurotic symptoms except blushing and appearing ill at ease during interviews. He gave the impression of a person who does not yield too easily to his troubles. He joined the army because of unemployment and because of a liking for military life, and the paratroops because of curiosity and the added pay. He was a moderately heavy drinker, but kept himself well under control. An only child, he was more attached to his father than to his mother, though he had had several fist fights with his father before joining the army. There is no history of neurotic traits in childhood. He usually held his feelings in, and preferred to be alone. He was at high school for three and a half years, but he disliked being cooped up. He had rather limited sexual experience. 'As for going around with girls, I'd rather drink.'

The fantasies in response to the test pictures revealed a hostile feeling toward both parents and a lack of feeling of support from either. In one picture the mother did not understand her son or listen to him. In another the father was bawling the son out.

Self-destructive wishes were expressed as well as a denial of sex which appeared dangerous. Strong repressed aggressive desires, and hostility against his parents and the army, with a consequent fear of punishment, guilt and anxiety, were apparent.

It appears that in the original gastrointestinal symptom, fear and disgust were combined, in association with the unpleasant topic of jumping. Disgust seemed to extend, though partly as rationalization, to the dullness and hard work of his environment, and to the irksome feeling of having to stay in one place. It was also connected with the question, very important to him, as to whether he really had 'guts', in the sense of courage. There were, obviously, thoughts of self-injury before his accident, but in contrast to the second and fourth cases, in which there were unconscious suicidal impulses, this man had the conscious motivation of escape (into the hospital). It is possible that these thoughts played a rôle in producing the accident by affecting his handling of himself. The gastrointestinal symptoms served to bind anxiety, and upon their disappearance an acute anxiety attack supervened, couched in the language of childish fears (animals attacking). The symptom of vomiting also expressed a rejection of an oral craving for affection and security aroused by the danger to which he had been subjected.

Fears of injury and of destruction to the inside of the body are evident. (Feelings 'like some of your guts missing. Everything went wrong with me inside like something missing or busted in there.') Schilder (10) points out that these 'fears concerning the insides . . . have a relation to sensations connected with dizziness and vestibular excitation', and connects the well-known sinking feelings in the stomach with this source of anxiety. In addition to jumping as a possible source of such sensations, the patient noted marked dizziness after his head trauma.

Conclusion: All, or nearly all, parachutists fear jumping. In a column in a camp newspaper a paratrooper writes: "Sweating out" a jump is the name given to a million hobgoblins that swarm inside a paratrooper shrieking continuously, "Don't be a damn fool . . . don't jump." The essential conflict is between the desire to escape and the demands of duty and personal pride. The gratification which is received from jumping serves to intensify this struggle.

The occurrence and character of the neurotic reaction depend on the sum of two factors complementing each other in varying degree. One is the individual's life experiences, which determine the form of the reaction, and which through the agency of repressed fears and unconscious fantasies may invest a situation with terror far beyond the actualities. The other is the traumatic situation comprised of events which may be considered adventitious. These include actual physical injury (particularly to the head) or narrow escapes from danger, which may befall either the individual himself or other jumpers.

The neurotic symptoms, being highly overdetermined, express: (1) the trauma in its own terms, i.e., they repeat the traumatic situation; (2) efforts to escape the danger; (3) attempts at healing the wounds inflicted on the personality by the trauma; (4) the trauma in terms of analogous threats to infantile existence which have been regressively reactivated; (5) other neurotic conflicts which parasitize on the available symptoms.

The reactivation of infantile problems, and the considerable degree to which the actual conflict is expressed in terms of childhood fears, are attributable to three factors that operate to varying degrees in all these cases except the third, in which the genital danger was primary. These processes also shed some light on the inability to give up the neurotic defenses after the way out of danger has been successfully achieved.

(1) The first factor is primarily a struggle against the social periphery of the superego (group demands), which is also perceived as a struggle against parental demands. The neurotic reaction actually has two phases. The first is the escape from danger. The second is the patient's attempt to avoid recognizing the significance of his escape, which the ego conceives as a defeat, and in which the superego heaps on reproaches of cowardice. The individual's evaluation of his masculine worth is lowered. On a more immature level this constitutes an escape from dangerous activity by becoming passive, and unconsciously signifies coming to terms with the

father and escaping death by sacrificing the genital. This regression in the face of unpleasant actuality is intended to direct the attention away from the immediate circumstances, as if the past after all were less painful than the present or at least had the virtue of seeming less real. The regressive expression thus serves as a defense against recognition of the desire to escape.

(2) As pointed out by Kardiner (6), the threat of destruction, of dissolution of the personality, overwhelms the ego. There is lack of time or opportunity for the successful compromise escape measures that are seen in the psychoneuroses. The burnt child develops a special inhibition with regard to further experiments with flame. The ego whose defenses have suddenly gone down develops generalized inhibitions against contact with the threatening world. It is no longer able to deal with the environment on an adult level. The inhibitions, acting as a sort of all or none defense measure, result in a contraction and diminution of the ego's powers. As a result the individual's adaptations of necessity take on an infantile character.

(3) The direct threat to life and the integrity of the body is connected symbolically and by association with specific early experiences which may be regarded as sensitizing. Furthermore, the act of jumping from an airplane can be considered closely to resemble the infantile experiences of separation which, if one follows Freud's (9) hypothesis, are viewed as the prototypes of all anxiety.

In general, these patients give the impression that oral desires and oral ways of dealing with the world are very important. This is mainly the result of regression, but strong preëxisting oral fixations appear to predispose to reactions of this type. The very limited heterosexual adaptations of three of the patients also suggests the etiological rôle of emotional immaturity. In three cases falling was of symbolic significance for many years. In some it gratified suicidal impulses and probably some passive masochistic desires as well. In these respects there is an increment of strength to the forces making for continu-

ance of the dangerous activity. Nevertheless, in two cases at least, because it is activity and a source of gratification, it is equated with revolt against the parents and thus the conflict is increased.

The responses to the Murray test cards in the main appear to follow the style of the anxiety state(10). The frequent responses that indicate hostility to parents or the environment demonstrate the resentment against the world which has ceased being friendly, and also serve as a defense against the unwelcome passive desires this has aroused.

The small number of cases makes generalization of limited value, and unfortunately nothing specifically applicable to the practical task of selecting parachutists is manifest. It does appear that the ordinary criteria of emotional instability such as a psychiatrist on an army induction board uses would be inadequate in the selection of candidates for the paratroops.

REFERENCES

1. BALKEN, EVA R., AND MASSERMAN, JULES H.: *The Language of Fantasy: III. The Language of the Fantasies of Patients with Conversion Hysteria, Anxiety State, and Obsessive-Compulsive Neuroses*. J. of Psychol., X, 1940, pp. 75-86.
2. FENICHEL, OTTO: *Outline of Clinical Psychoanalysis*. New York: The Psychoanalytic Quarterly Press and W. W. Norton and Co., 1934, p. 126.
3. ———: *Ibid.*, p. 128-129.
4. ———: *Ibid.*, p. 130.
5. FREUD: *The Problem of Anxiety*. New York: The Psychoanalytic Quarterly Press and W. W. Norton and Co., 1936.
6. KARDINER, ABRAM: *The Traumatic Neuroses of War*. New York: Paul B. Hoeber, Inc., 1941.
7. ———: *Ibid.*, p. 199.
8. MASSERMAN, JULES H., AND BALKEN, EVA R.: *The Psychoanalytic and Psychiatric Significance of Fantasy*. *Psychoanalytic Review*, XXVI, 1939, p. 346.
9. MILLER, EMANUEL, Editor: *The Neuroses in War*. New York: The Macmillan Co., 1940, p. 118.
10. SCHILDER, PAUL: *On Rotting*. *Psychoanalytic Review*, XXIX, 1942, p. 47.
11. ———: *Types of Anxiety Neurosis*. *International Journal of Psychoanalysis*, XXII, 1941, p. 226.

CIVILIAN WAR NEUROSES AND THEIR TREATMENT

BY FELIX DEUTSCH, M.D. (BOSTON)

In October, 1942, the Psychiatry Clinic of the Boston Psychoanalytic Institute opened its doors. Its object was both practical and scientific: the treatment of mentally ill individuals rejected by the armed forces—at or after induction—to prevent their undermining the mental health of the community, and the development of an emergency psychotherapy based on psychoanalytic principles. To reach such individuals it was necessary to contact those community institutions (hospitals, social agencies, the Red Cross, induction boards and similar organizations) which take care of social and mental health needs in peacetime and still more in wartime.

So far the clinic has dealt with case material referred for the treatment of conflicts arising in men anticipating induction, rejected at the induction station or discharged from service, and with the problems of their relatives and friends. Rejection or discharge orders were given because it was thought that the recruit would not be able to stand the stresses and strains of Navy or Army life (inaptitude discharge), or because of a psychotic or psychoneurotic condition (medical survey discharge), or because of undesirable character traits, including psychopathic personalities and borderline cases (Section VIII and disability discharges, respectively).

Of all the cases referred to date, sixty-one have been accepted for treatment, forty-five men and sixteen women. Two-thirds of the patients were between seventeen and twenty-nine and one-third between thirty and forty-nine years old. Strikingly enough, fifty percent of the male patients were the youngest or only child or the single boy among girls. (The number of patients is obviously too small to be conclusive.)

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Five could be classified as acute and fifty-six as chronic cases. Of the chronic cases, thirty-seven had never been treated either for their former or for their present condition. Twenty-six were diagnosed as psychoneurotic, fifteen as character disturbances, ten as psychosomatic disorders and ten as borderline cases. In accordance with the concept of the civilian war neurosis, the number of acute cases is almost negligible. Only people with an extremely labile psychic equilibrium succumb with a neurotic or psychotic reaction to the above war-related experiences. Only those whose mental balance is dependent upon the use of specific protective mechanisms are likely to lose that balance when the use of these mechanisms is disturbed by war conditions.

The foremost impression derived from our observations is that 'civilian war neurosis' is a family neurosis, *par excellence*, centered around the individual directly involved in the military matter, who is then either the contagious member, or becomes the target and victim of the neurotic reaction of the environment. This fact is of great importance from the standpoint of psychotherapy because the treatment, as in child analysis, reaches out to a group of people whose shaken equilibrium must likewise be reestablished.

The whole family may be thrown out of balance by an incident of this kind. The particular neurotic behavior will, of course, depend on the type of personality and on the structure of the underlying neurosis of the patient. In general, it would appear that the incidence of chronic neurotic reaction in wartime is less among civilians than military combatants. The term 'civilian war neurosis' emphasizes the word 'civilian'. It means the civilian of today in contrast to the civilian of yesterday, i.e. the soldier, who, if he survives, will become the civilian of tomorrow. It is commonly agreed that this civilian of yesterday, that is, the soldier, may develop a certain kind of neurosis during the war called 'war neurosis', 'traumatic neurosis', or 'shell shock neurosis', which is to be distinguished from peacetime neurosis on the one hand and civilian war neurosis on the other. Disregarding all other imponderables

of the war on the home front, to which nearly all civilians are more or less exposed, the main factor seems to be the spirit in which the population takes and withstands the imminent or factual changes of some members of the family from civilian to military life or vice-versa. In differentiating between peacetime neurosis, civilian war neurosis, and soldiers' war neurosis, it would appear that the civilian war neurosis differs from the other two types in that it is a mixture of both from the beginning. The unresolved inner struggle existed before the traumatic experience from without took place. Another difference between the neurosis of the combatant and the noncombatant lies in the etiological rôle of group organization in the development of the neurosis.

The soldier joins a homogeneous group which puts him under new but equal rules with others, which gives him protection and care and relieves him of his former responsibilities. His daily obligations are simplified and unified. Belonging to a potentially forceful group in the military organization gives the soldier a feeling of security which the civilian lacks. This self-assurance may exceed normal limits and lead to a belief in an invincibility, infallibility and invulnerability, belonging to a kind of heroic concept. Such ideas are not entirely conscious. They materialize when one soldier is accepted by the others on equal terms and feels obliged to live up to this rôle or through special deeds to exceed it. The conscious attitude towards military achievement may be so realistic that there is no suspicion that the apparent adjustment to the new realities has been accomplished only through the medium of fantasies. The consequent dangers become apparent only at the moment of a neurotic breakdown. This is different from true heroism which is an expression of the capability of overcoming a realistically evaluated danger, and which is proof of a mature personality. The actions of such a personality are not undertaken at the behest of the wish to become a hero, though they may result heroically, whereas the actions of an immature or passive personality strive to

fulfil a heroic fantasy by acting out infantile ideas of grandeur or omnipotence.

The main obligation of the soldier is to be aggressive at the right moment with the proper weapons, usually not as an individual but in common with his comrades. The fear of danger from without is hereby minimized. All the aggressive tendencies can be projected against external objects. These are the main elements which change the former equilibrium of the soldier's emotional life. The pillars of this new personality lie in the group formation to which he belongs and which backs him up by means of ordered discipline.

Ordinarily, the civilian remains in his natural group which, with some exceptions, does not deprive him of his civilian rights during wartime but permits him to retain his individual responsibilities and former activities. Nevertheless he, too, must acquire what is called 'morale', the will to resist aggression and develop hostile feelings against outside forces, without, however, the possibility of putting them into action. By and large, these hostile feelings are cultivated and increased by restrictions, deprivations and frustrations—by social changes, disruptions of family life, etc.—for all of which the enemy is held responsible, so that there is no escape and no permissible response except that inherent in 'morale'.

These war related traumata do not, as we know, involve abrupt changes in his previous adaptation, as does the 'shell shock' of the soldier. The external excitations are not intense enough to create a shock reaction and they do not involve an acute life threat such as the soldier faces; but they are nevertheless extrinsic factors which, like many others, may threaten the integrity of the whole organism and therefore lead to a war neurosis in the civilian. The differences in these traumatic experiences seem to be quantitative. A trauma which plays a rôle in a civilian war neurosis cannot be looked upon as catastrophic.

As we glance over our patients, we become aware that the

influence of the war situation, when reduced to a common denominator, consists of the fact that either an individual struggles to become a man while someone holds him back, or that he resists being a man while someone pushes him. Furthermore, the central factor is apparently the fear of his own aggression. Other individuals involved act simultaneously either by contagion or as participants in the conflict.

In short, we may say that the civilian becomes ill because he cannot acquire the new personality that the war asks of him. However, it is not the vicissitudes of life which make him sick but a change of equilibrium: the demand for increased aggression which is in conflict with inertia and the fear of acting out aggressive impulses. The expression of these impulses is not organized as it is in military life. The following case histories illustrate these points.

(1) For medical reasons existing prior to his enlistment, a twenty-one-year-old boy, the youngest son of a captain of a fishing boat, had received a discharge from the United States Coast Guard. His record during his service was excellent and he had been raised to a Seaman Second Class. The reason for his discharge was an exostosis on his right toe which led to a cellulitis soon after enlistment. He was operated on for this infection, then discharged and not recommended for readmission. He absolutely refused to accept either the discharge or the failure to be readmitted. He felt there must have been an error in the matter of his discharge. Thereafter he made little or no attempt to support himself and refused to return home. Despite the fact that he had been discharged from the service, he continued to wear his uniform, tried to enlist in the Marines, but was refused because of his previous discharge. Since it was impossible to get him to reënter civilian life, he was referred to the clinic.

There he repeated his claim politely but stubbornly and somewhat aggressively. He said he had done everything on the ocean: seining, lobster-fishing, all kinds of work on boats. 'You know', he said, 'what it's like to be on a fishing vessel and fish day and night. You have to be tough. That's all I

did before I went into the Coast Guard. I was five or six years old when I was on the fishing boat. I was the only man there that could handle a boat alone. I was the only fellow that could hold a boat. My father was the best one. He didn't even have to use a compass. It's just the same with me. This is driving me crazy now—that there is nothing I can do about it. I want to be in the service. I want to get back. It's something I can do. At home they don't know what to think of it. Mother is worried. She thinks it's something out of the ordinary. It really is. They still don't believe it. I can't come home as I am. I want to get in the Navy. That's where my life is. I just kind of like the water, especially right now before it is too late. They're shipping off all the young boys. That's what gets me. I was always a man. When I was thirteen, they always called me "Captain". Everyone on the coast of Maine called me that. When I got discharged, all the boys said, "You are lucky". I said, "What do you mean?" I don't want that life. Maybe some day I'll get back into the service. If I were in the service, I would be doing something for the country, something big. I never give up. My father told me never to give up. No matter how tough the storm, he always keeps going. He never turned back. I'll never turn back, never give up.'

He then began to boast in a childish way about his technical knowledge of engines and about his daydreams of fighting submarines and becoming a captain of a big boat. From the guardian of the home where he was sent by the Red Cross, we learned that he made trouble there, behaved aggressively and was wilfully destructive. He told the boys there that he had been discharged from the Coast Guard because he was wounded in battle by a piece of falling ship's mast. Since he was such a hero, he deserved better treatment. The patient exhibited this behavior for some time until, through a combined social and psychotherapeutic procedure, his equilibrium was again reestablished.

This type of infantile reaction is not exceptional and some-

what resembles that of psychopathic personalities who are acting out their grievances.

(2) The behavior of a twenty-four-year-old boy, deeply hurt and rebellious because of his rejection by the draft board, will further illustrate this type. He did not want to remain a sissy among girls. The blow of being rejected as a man had destroyed the equilibrium of this fundamentally passive, dependent boy who, under the protection of his grandmother, mother and sister, had vacillated between his infantile notions of grandeur and his need of dependency. He played the part of the big man for these three women who accepted him lovingly and backed him up against a powerful, blustering father and two older brothers. He returned to their helpful shelter whenever he failed to compete with these successful men. The rejection by the draft board meant to him that he had failed in competition with the men and that he had been rejected by the women in his rôle as a man. Following this blow, he immediately became intoxicated, started a fight and knocked out three people. He then went to bed with three girls in one night. He had spells of drinking and gambling, stopped working, committed minor delinquent acts, and changed from one girl to another. In the course of treatment at the clinic, these symptoms slowly subsided, and today he has made a fresh adjustment to life.

This is, by and large, the aim of therapy in most of our cases: to bring the patient back to his former condition, adjusted to *his* reality as it was prior to the traumatic experience. For instance in the following case, a compulsion neurotic deprived of the ceremonial which had protected him against anxiety, developed severe symptoms in relation to military service.

(3) This twenty-three-year-old man, reliable and hardworking, had found his freedom from anxiety by observing many habits, in which his mother coöperated. He had always chosen a job near his home where his mother prepared the meals. All his meals had to be prepared according to the number of calories and vitamin content, with regard to which he was an expert. He volunteered for the Navy, was accepted and sent

to a navy yard for training. At first everything went well but very soon he became quarrelsome, finicky about his food, and run-down in his appearance. Finally he grew panicky and was discharged. Home again, he recovered from his anxieties, but not for long, because he anticipated being called for induction into the Army. This anticipation brought him to the clinic, where he disclosed other fears and phobias, covered by the protective mechanisms laid down in complicated feeding rules and laws in which the rest of the family participated. The day before his supposed appearance at the induction center, he stormed the clinic for an appointment, which was granted. At the induction center he was rejected. He wrote us to this effect, adding that he was all right again and in no further need of our advice. We had this experience with several similar cases.

From the point of view of the common denominator mentioned before, let us quote a few typical neurotic reactions of persons indirectly involved in the soldier's conflict.

(4) One such victim was the father of a twenty-three-year-old student who was classified 4-F because of psychoneurosis. This young man had a type of passivity derived from immaturity and an unwillingness to accept responsibility. After being rejected he resumed his usual degree of activity. But the father, an obsessional neurotic, became depressed and withdrew from his surroundings. He was ashamed to meet friends who might ask him about his son's commission. He himself had served in the last war as an officer but was accepted only for limited service. However, many pictures of him in his officer's uniform remained exhibited at home after the war for his wife's admiration. The narcissistic blow of his son's rejection was too much for him. The boy was stormed with letters from home to rescue the father who was on the verge of a breakdown. Under this pressure, the boy asked for a reconsideration of his draft classification, which stirred up his fears of maturity and aggressiveness. He began to suffer from anxiety attacks and then had to seek help for himself.

This is a typical example in which the father uses the son as the fulfilment of his own heroic ideas.

(5) Another insignificant little man of the Babbitt type with a great amount of self-esteem had an immature, passive, dependent son, an only child, in whom the father encouraged an infantile, transient interest in machinery and radio hobbies. He likewise urged his son to volunteer for the Navy. This prospect of becoming a man by means of the tools of his childhood ambitions pleased the boy and he enlisted. However, a few weeks later he broke down when he found himself in the dangerous situation of having to act like a man, when he had anticipated only the application and continuation of the happy play of his childhood. He was soon discharged because of homesickness and anxiety states, and was referred to the clinic.

(6) Another example of an interrelated civilian war neurosis is provided by the following case. A twenty-four-year-old man of Lithuanian origin was deferred from induction for the treatment of a nonspecific urethritis. He was referred to the clinic because he could not make up his mind whether to join the Army or to remain with his mother, who claimed she could not live without him. He and his parents were all employed; financial support did not enter into the picture. However, his mother was occasionally under medical care because of a climacteric hypertension, and insisted that he accompany her on her visits to the hospital. Never completely weaned from the attachment to his mother, he gave in to her wish, because failure to do so aggravated her condition. When the time of his enlistment approached, she behaved as if she could not understand sufficient English. Hence he had to do the talking at the clinic she visited. Moreover, he neglected the treatment of his own condition, the cause of which was never found. The therapeutic attempt to help him counteract his passive submission could not be worked through in his case because in the meantime his mother underwent a hysterectomy for metrorrhagia.

(7) A similar conflict brought a fifty-three-year-old divorced

woman to the clinic. She was found on the street trembling and in tears. She said that her only son, twenty-three years old, who had supported and lived with her, had been sent to a military camp. He wrote to her only sporadically and had apparently freed himself of his devotion and dependence. She consequently became depressed and stopped working because she 'felt too weak in the legs'. She had relentlessly tried to get her son back, aggressively complaining about the injustice done to her. The social service index revealed that she had already approached several agencies and had received sufficient financial support. She had moved to rooms with a woman friend who shared a similar experience with her. They suffered together and decided to mitigate their grief by approaching social agencies for money to compensate their loss and their frustration—a kind of compensation neurosis.

(8) A thirty-seven-year-old unmarried woman developed an increasing feeling of loneliness, anxiety about the future and discontent with her work, after the departure of her younger brother for the Army. They had lived harmoniously together since the mother's death. He was 'a sweet boy', without girl friends, who read a good deal and preferred to do the cooking. After his departure she felt lonely, but did not want to tell him this because she wished to overcome her dependence. She was proud that her brother was in uniform. He was doing well in the Army and had changed considerably. He showed off when he came home and said he had had enough of being pushed around by her. Before he joined the Army he had not worked for five years. 'He just didn't go out to work', she said. 'I couldn't stimulate him. I wasn't a tonic for him.' She feels that somehow it was her fault that he did not work. Shortly before his enlistment she left him for a time, for which he never forgave her. Although they became reconciled again, she now feels herself at a loss and without hope for the future. She herself had never been able to get along with her mother because the latter would not let her bring boy friends home and invariably criticized them. None was good enough for her. The patient wants to marry but men 'do not seem to be

interested in me in that way'. Her brother used to tell her not to be so worried about him. "I'm not your husband", he would say and he was right but I just couldn't help it.'

This girl tried everything in her power to win the brother back and to upset him by her letters to his camp. She is under treatment at the clinic.

(9) In a similar set-up, the unhappy sister of a drafted brother (whom she always babied) attempted to join the WACS to try to overcome the loss of the brother who enjoyed being grown-up. Rejected for psychiatric reasons, she broke down and was referred to the clinic.

(10) In another family with a similar brother-sister constellation, a widowed sister, following the enlistment of her brother, fell into an acute psychotic state in which her landlord became the target of her retaliation for her loss, and several social institutions were held responsible for making good this loss. Her fifteen-year-old son, happy at being rid of the father substitute, tried to step into the man's rôle and became abusive towards his mother. The soldier-brother withstood his sister's claims and showed no desire to give up his uniform. Therapeutic and social service efforts were required to disentangle the situation.

The staff of the clinic is attempting to work out an emergency psychotherapy based on psychoanalytic principles and on the method called associative anamnesis. Effort is made to exclude as far as possible all fact finding from the interviews in order to (a) save time and to use even the first interview for therapeutic purposes; (b) to avoid questions not derived from the associative material brought by the patient; (c) to initiate from the beginning a planned psychological process to be carried over from one session to the next.

In order to provide the necessary freedom for the physician this procedure is followed: (1) a letter of referral is ordinarily sent to the clinic by the referring source before the first interview; (2) every patient is interviewed by our psychiatric social worker, who gathers the relevant facts of medical and social

history, makes financial arrangements and secures the patient's authorization for obtaining relevant data from hospitals, doctors, etc.; (3) only the psychiatric social worker makes and maintains continual contact with members of the family or with the referring institutions; (4) the staff member assigned to the patient has throughout the treatment personal contact only with the patient in a manner similar to that of analytic procedure. All information and advice for the patient's relatives and friends lies in the hands of the social worker, who obtains the necessary instructions and remains informed about the progress of the therapeutic procedure; (5) in some instances two or three of the patient's relatives or friends (when participants) have been simultaneously treated by different staff members, if it was thought that this procedure would shorten the patient's treatment; (6) from time to time special conferences were held to survey all the factors in the patient's illness.

In laying down these rules, we were guided chiefly by the idea that the life situation as a reality should be handled by the organization equipped for this purpose, whereas the significance of the reality to the patient, its psychological and symbolic content, belongs to the realm of the psychiatrist. Any attempt to combine external and internal reality complicates, retards or forestalls the accomplishment of the minimum therapeutic plan, i.e., to bring the patient back to his pretraumatic condition. It is not within the framework of this paper to describe in detail the therapeutic method used in these cases. The results so far obtained will be reëvaluated at a later date to determine whether the plan laid down at the beginning of the treatment was carried through. It is fair to say that we feel encouraged in this respect.

However, it may be said that the treatment was essentially directed toward the conflict between passivity and activity, hostility and peacefulness, aggression and submission. It becomes apparent that success depends on the redistribution of the libidinal factors which produce narcissistic self-esteem, the capacity to develop aggression, the ability to project that

aggression adequately and appropriately, and the courage demanded by independence and activity.

What of the outcome? Civilian war neurosis will settle down at the expense of a good deal of psychic energy. Unresolved aggression, however, will pave the way for further conflict unless we provide an adequate transformation for the accumulated aggression which no longer has the sanction of the leaders who stimulated it. Methods of gratification should be provided, lest projection mechanisms play too great a rôle. We see this happening even today, when the irreparable loss of love objects, health, and body integrity receive, apart from money compensation, no other gratification than pity. But pity alone will not suffice because, as a result of these severe traumata, guilt feelings are expiated; and freedom from guilt creates freedom of aggression. Mental health and peace of mind after the war will depend on the skill of responsible leaders in transforming these aggressions.

REMARKS ON THE COMMON PHOBIAS

BY OTTO FENICHEL, M.D. (LOS ANGELES)

I

Phobias, as examples of neuroses as well as with reference to their specific mechanisms, have often been made the subject of psychoanalytic research. Freud showed that all psychoneuroses are the outcome of conflicts between infantile sexual strivings, remobilized by regression, and fears of the dangers unconsciously connected with these strivings; that neurotic symptoms are a compromise between the instinctual demands and the counterforces motivated by fears. Since the motivating anxiety becomes manifest in phobias, they seem to represent the simplest type of neurosis. In a situation which unconsciously represents an instinctual temptation, anxiety is felt instead of excitement, and subsequently the situation (and therewith the anxiety) is avoided. Most infantile neuroses follow this relatively simple phobic pattern. In all other types of neuroses, the anxiety manifest in the phobias has found further elaboration.

However, the phobic situation does not in every instance represent a sexual temptation. It may represent an aggressive impulse¹ or it may be reminiscent of an early frustration, sometimes of an unconsciously feared punishment. Most frequently it combines an unconscious temptation with an anticipation of punishment.

This relatively simple explanation created many new problems, most of which have already been solved. For example, if the phobic situation unconsciously revives an infantile striving, and the anxiety functions as a 'warning signal' against the danger, it might be expected that the warning would be only a slight one. But the anxiety which accompanies most phobias is

¹This point was especially stressed by Helene Deutsch in *The Genesis of Agoraphobia*, Int. J. Psa., X, 1929; and Eduard Hitschmann in *Bemerkungen über Platzangst und andere neurotische Angstzustände*, Int. Ztschr. f. Psa., XXIII, 1937.

overwhelming. Freud distinguished the 'traumatic situation'—in which the organism is so flooded with emotion that the normal mechanisms of mastering excitation (discharge and binding) are inadequate—from the 'danger situation' in which the judging ego concludes: 'The present situation is not the traumatic one but it might become so'.² If it is the function of 'anxiety as a danger signal' to avoid the development of a 'traumatic situation', this function fails entirely in phobic anxiety and brings to pass precisely what it was intended to avert. The ego, which gives the signal of danger, starts something which it cannot control. This happens if the organism, through a series of previous repressions, has dammed up forces which are waiting for any opportunity for discharge. The ego, using what was intended to be the helpful 'floodgate' of the 'anxiety signal', loses control, releasing the flood.³

Another problem concerns the displacement of temptation or punishment to the phobic situation. Freud discovered that this displacement was a ruse to escape from greater dangers. Fear of horses was for little Hans less intolerable than fear of his father.⁴ The Wolf Man had to face the wolf only when his sister showed him the picture in the book, whereas he had to see his father every day.⁵ It is possible to remain indoors to avoid the street; it is not possible to get outside one's own body whose excitement was originally feared. Whereas the displacement, 'animal for father', substitutes one external object for another, the substitution, 'street for excitement', is a projection because an inner danger has been externalized. The same is true for phobias in which feelings of guilt are replaced by external fears.⁶ The connections between substitute and substituted are associative ones, and the paths of displacement are determined historically, somatically, and by the specific nature of the instincts involved. Sometimes the

² Freud: *The Problem of Anxiety*. New York: The Psa. Quarterly Press and W. W. Norton & Co., 1936.

³ The same point probably determines whether, in situations of real danger, fear activates purposeful defense, or paralyzes by anxiety.

⁴ Freud: *Analysis of a Phobia in a Five-Year-Old Boy*. Coll. Papers, III.

⁵ Freud: *From the History of an Infantile Neurosis*. Coll. Papers, III.

⁶ Freud: *Repression*. Coll. Papers, IV.

connections between the substitutes and the specific content of the unconscious are very transparent.⁷

A factor common to all phobias is regression. In childhood, dangers could be overcome by seeking the protection of seemingly omnipotent adults in the environment, and in a sense, all phobic patients behave like children whose anxieties are allayed by a comforting mother whose presence dispels fear. Such a demand for reassurance from parents or substitutes for them is especially evident in those cases of agoraphobia in which the presence of a companion is imperative. Since this condition does not obtain in all agoraphobias, it is improbable that the libidinous conflict centering around the companion is an essential feature. Helene Deutsch correctly stated that in those phobias in which the presence of a companion is demanded, the companion not only represents the protecting parent, but additionally the unconsciously hated parent whose physical presence serves as a denial of unconscious destructive fantasies.⁸

That the gains of regression are secondary is often not recognized. The individual is not striving for the 'helplessness' ⁹ of childhood but for the relative security of being protected by grown-ups. This neurotic helplessness which the patient feels as loneliness and lack of human contact is due to a remobilization of infantile instinctual conflicts.

II

Certain paths of displacement in phobias are determined directly by the specific nature of the warded-off instincts. A fear of being devoured serves the purpose of a defense against oral demands (even if these oral fears cover a more deeply repressed castration anxiety); anxiety aroused by going out onto

⁷The ways of these displacements are discussed by Anny Katan-Angel in *Die Rolle der 'Verschiebung' bei der Strassenangst*. Int. Ztschr. f. Psa., XXIII, 1937.

⁸Deutsch, Helene: *The Genesis of Agoraphobia*. Int. J. of Psa., X, 1929.

⁹Alexander, Franz: *Psychoanalysis Revised*. This QUARTERLY, IX, 1940, pp. 17-18.

the streets is a defense against exhibitionism; anxieties connected with high places are frequently associated with unconscious fantasies of erection; claustrophobias with fantasies of a return into the mother's body.

Not only exhibitionism and scotophilia are warded off in agoraphobia. Abraham described 'locomotor anxieties' in which the function of walking had unconsciously assumed a sexual significance. This is due to an increased erotic pleasure in walking, not necessarily identical with 'muscle eroticism'.¹⁰

A man with agoraphobia had the feeling that his legs were pulled from under him. His analysis revealed a close association between learning to walk and prohibitions against infantile masturbation. Losing his balance, losing his legs, and losing his penis, were intimately interconnected. In a similar manner, many phobias are directly related to sensations of equilibrium: falling, heights, travel by automobile and by rail.

Surprisingly little attention has been given to the erogenous significance of sensations of equilibrium. In addition to Freud's comments,¹¹ there are few papers confined to this topic.¹² Sensations of equilibrium and position in space are important sources of sexual excitement to children and subsequently to adults. However, because the painful sensations of the affect of anxiety are partly experienced through the medium of the identical sensory apparatus which registers equilibrium, the connections between erotic pleasure and anxiety are closer in the case of 'equilibrical eroticism' than in any other of the component instincts. This is confirmed by clinical experience. Conflicts emanating from the sexualization of infantile sensations of equilibrium give rise to equilibrical phobias. Furthermore, a phobia of another origin, through the association

¹⁰ Abraham, Karl: A Constitutional Basis of Locomotor Anxiety. In: *Selected Papers*. London: Hogarth Press, 1927.

¹¹ Freud: *Three Contributions to the Theory of Sex*. New York, Nerv. and Ment. Dis. Pub. Co., 1910.

¹² French, Thomas M.: *Psychogenic Material Related to the Function of the Semicircular Canals*. Int. J. Ps., X, 1929. Schilder, Paul: *Psychoanalyse des Raumes*. Imago, XXII, 1936. Schilder, Paul: *The Relations Between Clinging and Equilibrium*. Int. J. Ps., XX, 1939.

of sexual excitement with anxiety, may mobilize the infantile equilibrated eroticism.

Whoever wishes to study infantile sexuality should go to an amusement park where the concessions offer all such sensations except genital end-pleasure. Nearly all of these directly stimulate the sensory organs of equilibration and perception of the human body in space calling forth a high degree of emotional response. Some people frankly enjoy them as sources of erotic pleasure. Others are afraid of them because they have repressed the pleasure which had been once connected with these sensations. For some individuals, sensations of equilibrium and of bodily movement in space have become the sole representatives of infantile sexuality. Many who have no consciousness of infantile masturbation can recall a variety of games and fantasies about levitation, falling, floating in space, about changes in the size of the whole or parts of their bodies, of their beds being tipped or turned around, or of vaguer, similar sensations that 'something is rotating'. In some instances, no pleasure but only anxiety is connected with experiences of this kind, such feelings of 'alienation' and fear having completely replaced the original sense of pleasure in them.

In falling asleep, archaic types of ego feeling are regressively gone through before consciousness is lost. A high percentage of these is felt as equilibrated and spatial sensations. A healthy person is usually not aware of them unless he directs his attention to them. A small number of persons whose infantile masturbation is represented by these sensations may enjoy them as a kind of masturbatory equivalent; the majority is afraid of them and, in extreme cases, such fear may be the cause of severe sleep disturbances.¹³ Isakower has studied sensations of this type, and has shown how they may be utilized for research in archaic phases of ego development.¹⁴

Narcosis (chloroform and ether) differs from normal sleep

¹³ Cf. *Symposium on Neurotic Disturbances of Sleep*. Int. J. Ps. XXIII, 1942, Part 2.

¹⁴ Isakower, Otto: *A Contribution to the Pathopsychology of Phenomena Associated with Falling Asleep*. Int. J. Ps., XIX, 1938, Part 3.

in so far as during narcosis the period of self-observation is retained longer, with the consequence that the archaic ego feelings are experienced more clearly; hence the number of neurotic reactions to narcosis. A certain number of people enjoy being anæsthetized; by far the greater number develops a phobia of having to reëxperience it. This type frequently develops fear of death which in analysis is found to be conceived as a consummation of these sensations. Certainly other factors are involved in the fear of death, but it can with certainty be stated that a high percentage of death phobias are phobias of sensations of equilibrium and space. Sometimes they are manifestly so, as when they are combined with fears of falling, floating, exploding, and the like.

Febrile states, too, remobilize physiologically archaic ego feelings. Fever and Infantile Sexuality is a clinically very important chapter still to be written. Certain children enjoy the sensations of fever; others are afraid of them. The fact that sensations which are enjoyed to a certain degree, suddenly evoke extreme discomfort if this degree of intensity is exceeded is more easily observed in fever than in sleep or narcosis.

Elsewhere, I have affirmed the validity of Freud's theory that sexual excitement which is blocked in its progredient genital concentration, and cannot find its natural outlet for physical or psychogenic reasons, causes anxiety and discomforting vegetative sensations.¹⁵ These sensations consist partly of regressions to infantile equilibrial and spatial orientations. In psychoanalytic practice, when patients describe vague sensations of rotating objects, rhythmically approaching and retreating objects, sensations of crescendo and decrescendo, we often regard them as portents of a primal scene. Practically, this may well be true. But such sensations are not limited to a direct response of the psychic apparatus to an awareness of a sexual scene. They are less specifically the result of an overwhelming excitement which cannot be mastered because it

¹⁵ Fenichel, Otto: *Der Begriff 'Trauma' in der heutigen psychoanalytischen Neurosenlehre*. Int. Ztschr. f. Psa., XXIII, 1937. Here are surveyed also the causes for 'neurotic fear of sexual excitation'.

transcends the capacity of the undeveloped apparatus of discharge of the tension. When, in the adult, endogenous blockings hinder the normal course and discharge of excitation, the effect is similar and fearful equilibrial and spatial sensations are reactivated.

Hence, fears of falling asleep, of being narcotized, or of having fever are expressions of underlying fears of being overwhelmed by psychologically painful sensations of disequilibrium in space. External phobic situations may represent internal sensations of which the patients were originally afraid. An inability to tolerate the sound of dripping water, the ticking of a clock, or other rhythmic sounds, is a projection of the individual's genital pulsations, emanating from repressed sexual excitement.

III

The basic rôle of the projection of sensations can best be demonstrated in claustrophobia.¹⁶ These patients' dread of their own emotional excitation disturbs its normal course, augments the original anxiety, and initiates a vicious cycle.

One patient had the compulsion to leap from a moving subway train. Typically this was for her the avoidance and the simultaneous breaking through of sado-masochistic fantasies. It was her unconscious sexual aim to be beaten. Analysis showed clearly the combination of avoidance and achievement of her striving in the symptom: the motion of the subway car stimulated sexual excitement to which the patient at first submitted with pleasurable feelings; but when the excitement reached a certain degree of intensity, she felt it imperative to escape from the subway car at any cost, that is, from the excitement itself. Further indulgence of the excitement would release the traumatic situation. The impulse to leap from the moving subway train naturally contained the idea of the vegetative sensations of the traumatic situation: loss of equilibrium, and falling in space. The neurotic fear of falling springs from the same source. To yield to the impulse to jump

¹⁶ *Ibid.*

because of anxiety caused by sexual excitement is both an escape from the intolerable anxiety and the climax of this anxiety in the symbolic consummation of the forbidden wish.

Lewin's fine clinical study of claustrophobia¹⁷ found, as a typical content, unconscious sexual strivings which had acquired a specific form due to infantile fantasies about intra-uterine life. The development of the clinical picture of claustrophobia is facilitated by two physiological circumstances. Firstly, the imposition of any hindrance to bodily movements itself causes anxiety from a damming of drives (the fantasy of immobilization is as effective as literal restraint). Secondly, any state of anxiety is physiologically accompanied by feelings of being closed in; and thus, reversely, an external closeness (or the idea of it) facilitates the mobilization of the entire anxiety syndrome.

Being closed in is not experienced so oppressingly if one feels that it is possible to break out, and increases to panic if all avenues of escape are closed. Persons who are afraid of trains, boats and airplanes state that the impossibility of getting out in case of an emergency is unbearable, and that they figuratively rescue themselves from one station to the next while traveling on a train. Again, the endogenous excitement is projected onto the vehicle, and the urge to burst from the room or jump from the car is a need to escape from the intensity of this inner excitement, distorted into fearful equilibrium sensations.¹⁸

The close relationship between intense equilibrium stimulation and anxiety is also decisive for the psychological significance of the physical disease of seasickness. It may be that persons with repressed sexualization of body movements in space are more inclined to become seasick. It may also happen that an attack of seasickness activates repressed 'equilibrium memories' and thus precipitates neurotic reactions.

¹⁷ Lewin, Bertram D.: *Claustrophobia*. This QUARTERLY, IV, 1935.

¹⁸ Clinical experience shows that certain types of neurotic indecision are based on the same fear: a definite decision excludes the possibility of escape. Some forms of stubbornness too represent highly emotional rejections of commands which are felt to leave no loophole of escape.

What is feared by the patient in an enormous excitement of this kind is a breaking down of the ego. One patient felt anxiety only when someone other than himself was driving the automobile in which he was riding. 'Why should I be afraid', he said, 'when I can stop the car at any time?' It is the loss of voluntary decision which is feared and it is this loss of control which is represented by a moving vehicle uninfluenced by the wish of the passenger, by a room which cannot be left at will, and also by the mounting sexual excitement approaching orgasm.

Wilhelm Reich, in his analysis of the normal and the pathological course of sexual excitement, observed that in sexual intercourse the first phase of voluntary movements is followed by an involuntary phase in which the act can no longer be interrupted voluntarily without intense displeasure.¹⁹ This loss of ego control at the climax of sexual excitement is normally also the climax of sexual pleasure. 'Orgastically impotent' egos, according to Reich, do not experience this pleasure; for them, it becomes anxiety at the loss of ego control.

IV

The majority of agoraphobias have a specific conditioning relative to the 'narrowness' or 'broadness' of the fearsome street. The sensation of 'narrowness' is a basic element of the experience of anxiety. The first physiological symptom of fear is a feeling of constriction in the chest accompanied by difficulty in breathing. (The opposite feeling of spaciousness is physiologically coincident with mastery of fear. Nevertheless, since it represents a sudden change in the sphere of 'broadness', it may also serve, through 'representation by the opposite', as a symbol for 'narrowness', i.e., fearfulness.) It is in an attempt to protect himself against unpleasant sensations that the patient feels the street, and not his own body, as narrow or broad. This may explain the projection in agoraphobia. There are patients who are afraid only of narrow streets, some who

¹⁹ Reich, Wilhelm: *Die Funktion des Orgasmus*. Vienna: Int. Psa. Verlag, 1927.

fear only open spaces, others who are fearful of both. Most of them fear a sudden change in the width of the street they are passing through. Many agoraphobics, like all claustrophobics, have to ensure the possibility of an escape from the fearsome environment which represents the wish for an escape from their own sensations. These conditions are more essential in agoraphobia than the demand for a companion.

V

Some phobias are allayed if the patient fulfils the phobic demand—for example, avoids the fearsome street. Another patient who avoids the street may soon feel compelled to avoid certain rooms in his house. In the first instance, projection has succeeded; the patient now is afraid of the street *instead* of being afraid of his own excitement. In the second, the projection has failed; the dangerous instinct reëmerges from repression, and has to be projected each time. Whether or not the projection succeeds is dependent upon the economic equilibrium between instincts and anxiety, and that in turn upon the history of the personality.²⁰

The projection especially of sensations of disequilibrium may succeed in relieving patients of certain anxieties, restlessness and kinæsthetic sensations, if the environment actually meets the projection halfway. External confusion and turmoil rids them of their inner confusion and anxiety. In addition to people with a thunderstorm phobia, who, by partially projecting their sensations onto the thunderstorm, externalize the condition of their anxiety, there are others who enjoy thunderstorms because the external din makes complete projection possible. Since the noise is outside and not inside they do not need to be afraid any more.²¹

In certain individuals who require 'stimulation' or 'distrac-

²⁰ Cf. Freud: *Repression*. Coll. Papers, IV.

²¹ Cf. Fenichel, Otto: *The Counter-Phobic Attitude*. Int. J. Psa., XX, 1939, parts 3 and 4, for a discussion of the relation of phobias (in which the projective situations are avoided) to other neurotic conditions (in which the projective situations are sought after).

tion' to enable them to do their best work, analysis reveals neurotic disturbances of concentration which warrant systematic investigation. Their work is disturbed in these instances by an inner restlessness which is relieved in surroundings that provide external restlessness. The analysis of a man who was an excellent worker in coffee-houses (he preferred noisy ones) but was unable to work quietly at home disclosed that, while the café provided certain instinctual satisfactions (scotophilic and homosexual), the noise and confusion served chiefly the need to relieve intrapsychic tensions in an environment that was a substitute representation of them in external reality. It would be worth while to study which types of personality, when suffering from neurotic disturbances of concentration, need absolute quiet around them, and which types need external noise. Probably this does not constitute an absolute either-or. What is comfortable and relaxing up to a certain intensity may suddenly become unpleasant and frightening beyond this intensity. Also, some timid, frightened individuals often reassure themselves by their ability to frighten others.²² Some anxious people create an atmosphere of anxiety around them and feel better by creating the illusion that this anxiety is outside themselves. If this projection succeeds too well and they discover that people around them are really frightened, they may suddenly become excessively frightened themselves.

VI

The victim of a street phobia is not only fearful of the street, but, in interchanging the ideas, 'the street is narrow' and 'I feel narrow=afraid', behaves as if the street were afraid. The phobic mechanism makes use of the still effective animistic type of thinking that persists in the unconscious. There exists, moreover, one type of animistic misunderstanding of the world

²² Cf. Freud, Anna: Identification with the Aggressor in *The Ego and the Mechanisms of Defense*. London: Hogarth Press, 1937. Reik, Theodor: *Aggression From Anxiety*. Int. J. Ps., XXII, 1941. Hill, Lewis B.: *The Use of Hostility as Defense*. This QUARTERLY, VII, 1938, and Knight, Robert P.: *Intimidation of Others as Defense Against Anxiety*. Bull. of the Menninger Clinic, VI, 1942.

which is very similar to the mechanism of agoraphobia and which is commonly experienced in everyday life as well as in psychopathology. In an excellent paper published in 1912, Hanns Sachs²³ clarified the rôle of narcissistic projection in the feelings with which we react to nature. Consciousness of nature is less a process of becoming aware of the physical elements of nature than of becoming aware of feelings evoked in the individual by the contemplation of these elements. One's feelings are then consciously believed to be identical with these external realities. This is not to say that all emotional responses to nature are based on projections of one's feelings onto nature. An object in nature may also represent other external objects, and the emotions seemingly aroused by it may be displaced from them. A mountain, for example, may represent father's penis, the endless ocean or desert, mother's womb. But even if that is the case, the narcissistic element is never entirely missing. The person, experiencing himself in a landscape, does not simply feel love or hatred for the father-mountain or the mother-ocean, but undergoes a kind of identification with them. He feels the *unio mystica* with the nature-parents.

We may assume that projections are always operating in the consciousness of nature. The æsthetic categories in which landscapes are placed support this assumption. The landscape is 'sublime' or 'depressing' because the individual feels sublime or depressed in it. The same landscape has a different effect according to different moods of the observer.

The common observation that certain landscapes mobilize similar feelings in different people is also correct. The endless stretch of flat prairies makes many people melancholic; mountains usually make people more active and impulsive. This is due to the reflective effect of projections onto the ego.

There are innumerable preferences, prejudices and anxieties associated with types of landscapes, changes of weather and season, light and darkness, times of the day, etc., which, if studied in detail, would teach much about the projective

²³ Sachs, Hanns: *Über Naturgefühl*. Imago, I, 1912.

mechanism in question, and about the ontogenetic connections between infantile sexual excitement and the sensations which are later projected.

Projections of sensations, especially of equilibrial and spatial sensations, are not limited to the phobias and the 'consciousness of nature'. They also make their appearance in all kinds of ego regressions because the development of the reality principle not only means the abandonment of a primitive tendency to see the world as one would like it to be, but also of a primitive tendency to see the world not as it is, but as one is oneself. For instance, 'animistic misunderstandings' of this kind in which proprioceptive sensations are involuntarily expressed manifest themselves in children's drawings of external objects,²⁴ in various schizophrenic phenomena,²⁵ and even in the child's simple castration fear.²⁶ These problems, however, are already beyond the scope of phobias.

VII

Observations are presented to supplement the theory of phobias—especially with reference to disturbances of the (erotized) sense of equilibrium and of the body in space—in persons and in situations in which subjective excitations tend to be transformed into anxiety.

The fact that these anxiety-producing sensations are projected onto the phobically endowed objects is especially stressed. This fact, which has been marked by Freud and Abraham, is here presented in a somewhat different light.

In emphasizing the importance of the fear of overwhelming

²⁴ Spielrein, Sabine: *Kinderzeichnungen mit offenen und geschlossenen Augen*. Imago, XIV, 1931.

²⁵ For example, in the 'Influencing Machine' (Tausk, Victor: *On the Origin of the 'Influencing Machine' in Schizophrenia*. This QUARTERLY, II, 1933) or in the projection of bowel sensations onto the object of a delusion of persecution (van Ophuijsen, J. H. W.: *On the Origin of the Feeling of Persecution*. Int. J. Ps. I, 1920; Stärcke, August: *The Reversal of the Libido-Sign in Delusions of Persecution*. Int. J. Ps., I, 1920). From a different point of view, the same phenomena are discussed in: Cohn, Franz S.: *Practical Approach to the Problem of Narcissistic Neuroses*. This QUARTERLY, IX, 1940.

²⁶ Cf. Fenichel, Otto: *Frühe Entwicklungsstadien des Ichs*. Imago, XX, 1937.

inner excitement as a source of anxiety in the phobias, little has been said here about the fear of castration and the fear of being abandoned. These are neither denied nor minimized. These deeper forms of infantile anxiety are the very root of the development of the fear that the ego will be flooded with its own excitement. The infant, not yet able to satisfy its demands, frequently experiences 'traumatic situations'. The memory of such frightening experiences certainly forms the basis for the tendency of the ego to anticipate and avoid them. In so far as this is the basis of all later fears, we may say that all anxieties are fears of being flooded by unmanageable quantities of excitement. When the ego has developed sufficiently to achieve adequate instinctual satisfaction and to master reality, instinctual temptations should not be avoided as dangerous but anticipated as pleasurable. In an adult ego the idea that excitement is necessarily dangerous emerges only when satisfaction is frustrated by endogenous obstacles, that is, by fears of castration or of loss of love, originating in animistic misinterpretations of the external world.

KNOCKING ON WOOD

A NOTE ON THE PRECEDIPAL NATURE OF THE 'MAGIC EFFECT'

BY ROBERT FLIESS, M.D. (NEW YORK)

Among the many 'effects' of magic, one only is subject to clinical observation: an alteration in the performer's (or the participants') state of mind. In defensive magic this alteration can be described as the exchange of reassurance for fear, and in all magic as, subjectively, the acquisition of a conviction or, objectively, the formation of an illusion. Since this change in the affective situation (*Affektlage*) of the individual practicing magic always presents itself as the affective constant underlying the many ideational variables in the various magic procedures, it deserves to be singled out as *the* magic effect.

One could define the 'magic effect' as the transformation of the magic fantasy into the magic illusion by means of the magic performance—if each of these elements were always present. But they are not. The overt magic fantasy, a formation akin to the daydream, is the secondary elaboration of a latent fantasy which is essentially unconscious. This unconscious fantasy is, of course, invariably in existence but it may be elaborated upon to the point at which its elements in the conscious product are completely consumed by the process of rationalization. On the other hand, elaboration may be altogether lacking. The magic fantasy then remains completely unconscious and the performer experiences no more than the impulse toward the magic action. Rather than cover these instances by the introduction of the more or less self-contradictory concept of an 'unconscious illusion', we prefer to deny the applicability to them of our tentative statement, and to acknowledge instead that here the magic effect simply appears in isolation, i.e., as the result of a purely affective process which compels the magic performance without any ideational profit to the performer.

It is a magic ritual of this class which will here be studied. The objective is to gain insight into the instinctual make-up, not of the magic procedures *per se* (which can of course provide outlets for any number and kinds of instinctual drives), but of what it is that endows them all with the specific quality of 'magic'. It is a quest, in other words, for the instinctual nature of the 'magic effect'.

The method¹ is obvious: in the absence of any conscious product of elaboration, nothing but the performance itself can be analyzed. Furthermore, since the ritual in question is a common one in our civilization, the performer is really a collective one, from whom no associations can be obtained. This circumstance restricts our analytic technic exclusively to the interpretation of symbols; but the clinical confirmation—gained later and independently—is thereby given the added value of a general check on the power of symbol interpretation.

THE ANALYSIS OF A RITUAL

One of the most widespread magic activities practiced in the modern world is 'knocking on wood'. Classically, the gesture is performed three times with the knuckle of the bent index finger, preferably on a table, window-sill, or the like, with an approach from below. The very persons who most loudly proclaim their freedom from superstition are most devout in observing this ritual. While they look about for a suitable, i.e., unquestionably wooden, object, they accompany a more or less graceful attitude of detachment with a smile of indulgence. They must knock on wood lest Fate reverse the favorable state of affairs with which they have just expressed satisfaction.

In the analysis of this survival of defensive magic one must place particular emphasis on the primary process of condensation. For, in addition to the symbolic elements, wood=mother, finger=penis, and three=male genitalia, all of which one might term 'substantive' (i.e. performing the function of the grammatical subject), certain others are present which

¹ There are, of course, other methods, employable by the ethnologist, the philologist and the historian.

one should more properly call 'predicative' and 'epithetic'. The overdetermination is manifested in these elements.

The individual is forced to perform this ritual by a fearful tension, produced by the anticipation of aggression at the hands of 'fate' (formerly the parents). In view of the narcissistic regression induced by the fear, the release of this tension, as it is obviously achieved by the observance of the ritual, must have been brought about through an instinctual discharge. 'Dualists'² will expect such a discharge to bear the symbolic vestiges of aggressive, as well as of libidinal, gratification. They will therefore be ready to find in the knuckle, with which the knocking is done, the aggressive element of the finger. They will remember that knocking, as such, is aim-inhibited, and therefore preliminary to 'knocking up' (slang for impregnating) as well as for 'knocking down'. They will, in other words, be prepared to acknowledge that our magic product shows, as does any compulsive action, the gratification of ambivalent strivings as insurance against anxiety. However, since the ritual draws its defensive powers from the discharge, through aim-inhibited trial action (*Probehandeln*) of libido as well as of aggression, they will expect a more thorough symbolic interpretation of its magic elements to name the *parent object* as well as the *nature* of the libidinal striving.

Such an interpretation must go further than that of the well-known and more or less preconscious intention of appeasing the retaliating father (God, fate) in whose presence one has been boasting, which is confined to an intermediate psychic layer, and therefore not entirely free from the characteristics of rationalization. For it reveals that the deepest and truly unconscious meaning of this fragment of contemporary magic is addressed to the *mother*. She, the mother (womb), is approached from below, and with an ambivalent attitude towards castration: the subject's own phallic genital is denied (the bent finger) and at the same time affirmed (the three³

² I.e. those concurring with Freud in positing two essentially separate instinct groups, eros (libido) and death instinct (aggression).

³ Cf. Brunswick, Ruth Mack: *The Preœdipal Phase of the Libido Development*. This *QUARTERLY*, IX, 1940, p. 306: '... the child at the beginning of the *phallic* phase *still* primarily wishes to have its genitals *touched* by the

knocks). The 'knocking' itself can only be an intended destruction and impregnation.

If, however, this be the unconscious ideational residue of a symbolic action whose magic effect, the abolition of fear, testifies to the attainment of discharge, the nuclear impulses, attaining their gratification, must be looked upon as derivatives of *prædipal* strivings. Such a formulation, confirmed by the singleness of the symbolic object and the irreconcilable ambiguity of the instinctual aim, is indeed not refuted by the 'partial' character of the libido. This libido is *oral*, since *speaking* is the transgression to be undone. Hence, when the ritual is accompanied by a denial, as it is in German, the magic word is *unberufen*, or jocularly, *unbeschreien* (*un*=negative prefix; *rufen*=to call; *schreien*=to shout), i.e., the assertion of not having spoken.⁴

In its true orality, and in the psychology of the *prædipal* phase which characterizes it, this minor ritual offers a rather instructive analogy with a larger ceremonial that was performed at the burial of the Austro-Hungarian monarchs. In this ceremonial the dualistic meaning of symbolic knocking becomes elucidated by the familiar symbol equation between death and

mother' (Italics mine). It appears as though this passive wish, here stimulated by the smiling of Lady Luck, were, in the ritual, mastered by the superstitious through what Freud calls a 'transformation into activity' (*Wendung in die Aktivität*).

⁴'*Unberufen*' is not infrequently combined with or replaced by the triple interjection, '*toi-toi-toi*', which impressed me as an onomatopoeic attenuation of the act—a no less oral one—of spitting (thrice). My colleague, Dr. J. Hoffman, whom I consulted about this, informs me that the interjection is sometimes actually combined with spitting. He furthermore kindly put the following data at my disposal: Amongst Eastern Jews spitting in itself is considered an antidote to the evil eye. Thus a mother may kiss her child three times, spitting after each kiss, if she thinks it has been 'overlooked' with the evil eye; or will counteract the effect by licking the forehead of the child twice and spitting. There is also (analogous to '*un-berufen*') a merely verbal negation of the evil eye, '*kene hore*' (= 'no evil eye'), about which Dr. Hoffman remarks: 'The idea of avoiding divine vengeance (*Mir grauet vor der Götter Neide*) does not seem to be directly connected with this expression, although the fear of envy is undoubtedly implied'. This last statement, made by my informant without knowledge of the content of this paper, expresses independently the devaluation of the popular interpretation of the ritual (or its substitutes) as essentially a protection against divine vengeance.

regression into the womb. Before entering the ancestral vault, the imperial cortege had to stop, and the Master of Ceremonies had to beg entrance for the dead monarch by knocking three times at the closed portal. At the first knock, the Capuchin within asked: 'Who is there?' And was answered: 'His Imperial Majesty, Emperor of Austria, King of Hungary, etc.'. To this the monk had to reply: 'I do not know him'. At the second knock the answer to the repeated question was: 'His Highness, the Emperor Joseph'. And again the response: 'I do not know him'. Only with the third knock, the announcement became: 'Our poor brother, Joseph', and the Brother, opening the door, responded: 'Him I know'.

Here an interpretation to the mere effect that God demands utter humiliation before he is willing to take even a most distinguished son unto himself would once more be superficial. For it is again not the father, but the mother, the 'father's house', to whom admission is asked for the mortal at the end of his journey. And as the grave will accept none but the dead, so the vault, the womb of the earth, will not receive the traveler into the 'untrodden, not to be trodden, into the unwanted, not to be asked for' (*Ins Unbetretene, Nichtzubetretende, Ins Unerbetene, Nichtzuerbittende*), unless he resigns himself to deflation, irreversible and utter. Yet the tripleness of the knocks at the vault, the voice inside, the symbolism of receiving (=conceiving) and 'knowing' are an indispensable libidinal⁵ trace even here. They are as imperative as is Mephisto's unexpected antithesis in dispatching Faust to the 'realm of the Mothers': 'Sink down then; I might also tell you: Soar!'—an antithesis, fusing Eros and Thanatos of the ancients, by equating the upward and downward in their holding of the torch.

In scanning such an interpretation, it may be kept in mind that Freud's discovery of the preœdipal phase requires of us a change fundamental to psychological thinking. Empathy has been to us what '*Anschaulichkeit*' (imaginability) was to

⁵ Cf. Socrates' dream on the morning before the eve of his death: 'There appeared to me the likeness of a woman, fair and comely, clothed in bright raiment, who called me and said: O, Socrates, the third day hence to fertile Phthia shalt thou go.' (Plato: *Crito*. Translated by Jowett. Italics mine.)

the physicist of old. The latter has long since been compelled to relinquish the quality 'imaginability' in any description of his phenomena. We have only recently been led to make the analogous sacrifice of foregoing empathy in the evaluation of preœdipal material. Such a sacrifice is inescapable. A reversal of our ego differentiation which should be complete enough for the empathic realization of purely preœdipal strivings remains as much a mere hypothetical limit as does a defusion of instincts which should be complete enough to make possible the ideational and affective consummation of pure self-destruction.

Returning, we find that the problem raised by the analysis of the habit of 'knocking on wood' is the problem of the deepest meaning of all magic. The dependence of modern man upon magic in a disguise ever more complete—no less than its persistence in modern medicine—testifies to the indelible powers of magic as a source of gratification. The immunity of the magic-addicted nuclear layers of the ego to character formation might, however, make one distrustful of any interpretation employing œdipal elements, unless these be restricted to overdeterminations. It is the preœdipal depths of the soul—unfathomable by empathy—into which highly organized man permits only brief glimpses, which appear to be the true 'locus' of the magic effect. For we see our agnostic contemporary, preœdipal rapist and matricide that he is, show only momentary anxiety following his oral transgression of verbalizing success with Dame Fortune.⁶ He knocks on wood, appears pacified, and continues his conversation.

⁶ Indeed, the foregoing analysis was long ago epitomized by Shakespeare:
Hamlet: . . . Good lads, how do you both?

Rosencrantz: As the indifferent children of the earth.

Guildestern: Happy, in that we are not over-happy, On Fortune's cap we are not the very button.

Hamlet: Nor the soles of her shoe?

Rosencrantz: Neither, my lord.

Hamlet: Then you live about her waist, or in the middle of her favors?

Guildestern: Faith, her privates we.

Hamlet: In the secret parts of fortune? O most true, she is a strumpet.

— *Hamlet*, ii, 2, 11. 228–238.

CLINICAL CONFIRMATION

During the two days following the writing of the foregoing note, two analytic hours so thoroughly confirmed every detail of the interpretation suggested in it, that I feel impelled to append a summary of them. The corroborative value of this material lies in the fact that here constant and variables have changed places. In the theoretical discussion the ritual was given; its *preœdipal* nature had to be derived by means of symbol interpretation. In the clinical material, the preœdipal character of the patient's conflict had already been amply attested. In describing a sexual *ritual* which this conflict enforces she directly informs us of the oral character of the libido, and in associating to this description she uses, with absolute spontaneity, each and every one of the symbolic elements which constitute the two rituals previously compared.

The patient is a female, in her second analysis, an analysis predominantly concerned with her preœdipal conflicts which, as far as they escaped her first treatment, are the almost exclusive source of her remaining complaints. Commenting on a homosexual liaison, she says that she is compelled to call the woman every night and recognizes this behavior as compulsive. She has to do this because—and here she is groping—there is a certain feeling connected with it, a feeling that '*something would happen*' if she did not. The woman friend would 'explode', would 'get me by the throat', would 'swallow me'. 'Yes, a big animal swallowing a little animal, that's what it is. She would eat me, and would explode into little pieces.'

'You know', she goes on, as though to justify her imputation, 'my friend, to be sure, is a lady, if there ever was one—a real aristocrat. But you should see her gobbling the food at my house; you should see the greed with which she smokes cigarettes, or eats candy, and it is always my food, my candy! . . .' (Only two days before she had described her perpetual conflict over stealing candy from her mother throughout her childhood. To this she had added the detail that the candy was hidden by the mother in her underdrawers, locked in a wooden bureau,

on top of which lay her gloves, hiding the key.) After the patient had recently (for once) broken her compulsion to telephone her friend, the latter had fallen ill, and the patient firmly believes in a causal connection between the two events.

One was struck by the fact that the ominous expectation that 'something would happen', which enforced a compulsion, was obviously preœdipal, oral-destructive, and addressed to the mother. It was apparent, however, that a number of other elements which belonged to the complex described in the 'knocking on wood' were missing. There was no equivalent to the knocking itself; no reference to penetration, triplicity, interment, or impregnation.

In the very next hour, however, the patient, immediately and without any solicitation, made every one of these emendations. She begins by referring spontaneously to a circumscribed area on her abdomen, called 'the spot', which had figured with some prominence in her first period of treatment. It is located in the middle of the abdomen, about halfway between the upper edge of the pubis and the navel. This 'spot' has to be pressed by her sexual partner, or by an object, for without such pressure an orgasm cannot be reached whether in activities with a heterosexual or a homosexual partner or in masturbation. She now mentions for the first time, that 'hitting' this spot, while pressing her naked stomach on her partner's, was 'what mattered' in her relations, and describes a particular feeling about it, the feeling that *'nothing could or would touch or hurt you again, when this spot was touched in this way'*.

'This', she adds somewhat enigmatically,⁷ 'is the same as the "grumbling"', of which she had spoken only a few hours before. ('Mother's stomach, in her infancy, occasionally made the sound of water splashing in a container, a phenomenon called 'grumbling' by the patient. It was always a matter of anxious fascination to her for it showed that, as she puts it,

⁷ Enigmatically, that is, to the analyst, who did not then know that she would shortly afterwards liken this 'spot' of hers to 'a front door with something behind it'.

'something was starting again', that 'maybe it wasn't all over' with the younger brother's⁸ birth.)

'Hitting the spot', the patient goes on to explain, was also connected with kissing the woman friend by putting her tongue into her mouth 'as far as you can go'. 'But', she surprisingly adds—and these are her own words—'*there is something about being buried about this*'. When asked for an explanation she says, 'I mean having her arms and legs around me . . . *getting inside of her . . .*'. She specifies, however, that the feeling is not one of getting into the woman's stomach, but rather of 'wanting to be enveloped by her', which, as she puts it, is 'like being swallowed by her'. She concludes with the remark that there is a direct connection between her mouth and her spot, which feels 'warm and protected', a connection between sucking the friend's breast and lying on her 'nice and big, but soft' stomach.

At this point one is finally able to assemble for the first time the typical sequence followed in the patient's sexual activities with her partner. The latter has always taken a passive rôle. The patient first sucks the breast of the partner, then lies on her, kissing her, tongue in mouth. Finally, straddling her thigh, she rubs her own genital on it, while touching the partner's. It is in this way that she reaches the climax.

The rest of the hour is taken up by the following dream:

The patient is lying on the couch, as she does in analysis. She looks down *once* on herself, and sees that she has a boy's penis. She is amused and disappointed. She looks down a *second time*, and now has a man's penis. She is surprised. Then she looks down a *third time*, and a nurse, who is standing at the right, and at a little distance from the couch, takes a baby out from between the patient's legs. But the baby is made of connective tissue, is not alive, is queer, not human—a monstrosity—and gives the dreamer an *ominous feeling*.

It is this feeling, the premonition that '*something would happen*' which brings us back to the beginning of the two

⁸Cf. the Brother's voice in the vault of the Capuchins in the ritual described above.

analytic hours which have been here surveyed. The dreamer, whose originally compulsive masturbation now takes the symbolic form of telephoning the friend (who is the mother as a sexual object), has to discharge ambivalent strivings, active as well as passive. Did she not do so, she would be *eaten*, with the result that the cannibal would explode into pieces.

These oral strivings underlay the infantile candy stealing by way of the *penetration of the mother's underwear in the wooden bureau* which is unlocked with the key⁹ hidden in the gloves or mother's '*hands in absentia*'—these oral wishes were discharged throughout adolescence by compulsive *masturbation on wood* (chair, sofa) in the parental house, when it was what she used to call 'empty', i.e., had no one in it but herself and her little brother. They are now gratified by a mutual 'hitting' of stomachs while performing coitus-play with the corrected mother, who is, although still voracious, no longer sexually forbidding, but yielding and soft. The incessant ambivalence makes such a relation, however, still *ominous*, procreation a threat, and regression into the mother's body a burial. Thus of all the symbols only that of *triplicity* (the three knocks) seemed still missing; but the dream offered at the conclusion of the same hour, furnishes even this last detail.

A second but very different patient presented the same symbolic material. It came as unexpectedly as in the first case, but it was characterized by more condensation, and in addition by an anal 'mode of expression'.¹⁰

The patient, a young woman, continues the previous hour, which had ended in a fantasy reported with great reluctance. An imaginary male lover has obtained knowledge of the patient's foremost sexual wish, a mutual touching of anuses, and agrees to it by saying: 'All right, come on, let's do it. Nobody's going to *die* from it'. This stimulates in the patient

⁹ Faust obtains from Mephistopheles a magic key which leads him down to the realm of the Mothers.

¹⁰ A term distinguishing between a regressive mode of expression (*regressive Ausdrucksweise*) and true regression (*echte Regression*). The latter alone indicates the regression of the libido.

the craving to kiss the anus, which in turn arouses the final desire to lick it.

She accepts my remark that this fantasy interprets the candy which she formerly ate in bed while reading detective stories and masturbating, with the fantasy of 'A child is being beaten', and associates to it her old obsessional 'fear of the mummy'. This fear had been a torture to her throughout puberty. It was aroused during a visit to the museum where Egyptian mummies were on display, when she saw the red toe of a mummy protruding from the wrappings. At this sight she was struck with the repelling and horrifying compulsion to *eat* the toe. From then on merely entering the building made her become, as she now calls it, 'completely demoralized'. 'God only knows', she exclaims, 'why they always had to pass through the Egyptian rooms before going anywhere else. The mere sight of the cases terrified me. That is to say', she corrects herself, 'not the cases, but the wrapped mummies—that was it'. 'The "what" mummies?' I ask, unable, as I frequently am, to understand the word through her blurred enunciation. 'The *wrapped* mummies,' she retorts snippily, and annoyed, 'Wrapped, r-a-p-p-e-d!' 'R-apped?' I ask; and she stops in amazement. 'No, *W*-rapped, of course', and adds pensively, 'Funny, I completely forgot the *w*'. This little occurrence reminds her of a children's joke, in which someone says, '*Rap, rap, rap!* Come in the *room!*' When they finally came in, what did they find? Wrapping paper! She is surprised at the fatuousness of this joke.

Here again is the same aggregate of symbolism. It tells the same story. *Touching* (this time directly an orifice), *dying* (or its denial), *mummy* (a pun on the historic mother, but one dead and buried; her phallic character signified by the toe that protrudes), and *eating* this mother (strictly speaking, a part ¹¹ of her, toe or *fæces*). This fantasy forces the patient into so deep a regression that she reverts to the phonetic spelling of childhood. Similarly, her speech—for the second that it takes to pronounce the crucial 'word bridge'—becomes blurred like

¹¹ 'Partial incorporation' (*Partialeinverleibung*), Abraham.

that of an infant. The triplicity is at last supplied by the children's joke, in which the mother (paper, a wood derivative) is found inside herself (room).¹²

I had hesitated, because of its repetitive character, to add this second case fragment, until I finally recognized that its very reiteration was noteworthy in indicating the existence of what appears likely to be a typical complex: a preœdipal theme expressed with symbolic variations. I have since been able to recognize fragments of it even in beginning analyses, and shall not be surprised if further clinical studies by various observers should succeed in delineating a nodal constellation typical enough to be considered a preœdipal counterpart to the œdipus complex.

SUMMARY

Psychoanalysis is applied to a modern ritual, whose symbolic elements are extracted and subjected to standard interpretation. Such a procedure reveals that the compulsive habit of 'knocking on wood' temporarily abolishes the fear of castration or death, by discharging in a symbolic, and therefore innocuous form, preœdipal strivings of an ambivalent oral character. The juxtaposing of an abstract of two analytic hours testifies to the correctness and pertinence of the symbolic interpretation employed. It does so after the fashion of a clinical experiment, in that the patient, who associates to a sexual ritual of undoubtedly preœdipal character, furnishes each and every one of the symbolic expressions in question. A fragment of another patient's analytic hour is appended which shows the same symbol aggregate as the first, although in an anal mode of expression.

CONCLUSIONS

1. *The magic effect appears to be dependent upon the preœdipal character of the symbolic gratification achieved through the magic procedure.*

¹² It may well be the expenditure of cathexis for this symbolic preœdipal gratification which, through its becoming superfluous, furnishes the economy for children's enjoyment of a joke unenjoyable by the adult.

This statement limits itself to the instinctual nature of magic. Although touching upon the latter's economy, it does not deal with its topography and its dynamics. It therefore merely indicates one mandatory condition for the magic effect.

2. *The impossibility of an empathic grasp of truly preœdipal cravings and gratifications is an obstacle to their understanding by the analyst.*

An example, taken from the material reported, may briefly illustrate this conclusion. The patient specifies without being queried that her wish to 'get inside' of her object does not mean 'getting into her stomach' but being 'enveloped by her'. Nevertheless, she immediately equates this with 'being swallowed by her'. A bewildering bit of information! In an utterance concerning an œdipus situation, such statements would be regarded as self-contradictory and a product of the defense. For, in dealing with an instinctual sexual action, we are accustomed to account for it in terms of the erotogenic zones in the subject, as well as in the object, provided the action is neither aim-inhibited nor aim-deflected. In an utterance involving preœdipal wishes such an accounting must be foregone. We have to resign ourselves here to feeling somewhat at loose ends in our grasp of an instinctual situation where 'being swallowed' indicates the oral-libidinal character of an instinct-derivative, whose aim, although passive incorporation, is not, nevertheless, that of being eaten.

This requisite abstention from empathy, while a difficult task for the individual analyst, offers at the same time a definite challenge to our psychological thinking.

3. *Intricate combinations of several symbolisms can safely be fully exploited by standard interpretation.* As a compensation for the empathic difficulty, if you like, symbol interpretation seems to surpass the measure of reliability with which it is commonly trusted. This is possible because each element in the symbolisms, regardless of its grammatical character and its place in the aggregate, remains firmly committed to its own symbolic meanings. Thus, under favorable conditions, insight into a complete instinctual process can be obtained by this means.

4. The instinctual process in question seems to constitute a *typical* complex, representing a nodal point in the unconscious elaboration of persistent preœdipal strivings.

Postscript

Recently, i.e., almost a year after writing the foregoing, the patient who had furnished the material contained in the first clinical report surprised me—who had thought myself familiar with her habits—by a most unexpected report.

Whenever she has to 'stand up' before a group, particularly when she has to 'speak' to a 'new' group, or whenever she has to give a 'paper' (cf. the children's joke in the second clinical report), she actually touches wood! She does so while praying for strength; but she does it with her knee.¹³ She uses a chair for this purpose but the chair must be wooden. This ritual, she adds, has replaced an earlier one practiced before her first analysis, in which she used to get down on both knees and pray. She continues this report by reminding me that, during a state of anxiety before a public appearance, I had once answered her question, 'What can I lean on?' by saying, 'You need not lean on anything. You can stand on your own good legs.' 'This', she concludes, 'is what I say to myself now. And when I feel nausea with the fear, I tell myself: I can rely on my own good stomach.'

It is obvious that this patient, in using her knee, has to 'knock' only once, not three times, since she employs what could be called a 'displacement symbol' (i.e. the symbolic substitution of one part of the body for another), instead of the ordinary symbol of triplicity. Her verbalizations, however, confirm Groddeck's interpretation of the symbol-compound: 'knee' as womb (cavity), child (patella), erection (stretched knee), deflation (bent knee). 'I will not be killed', she assures herself, 'through my phallic approach to the mother; I can rely on the powers of my own good stomach for our mutual oral incorporation.'

¹³ On the symbolism of the knee cf. Groddeck, Georg: *Der Mensch als Symbol*. Vienna: Int. Psa. Verlag, 1933, p. 12, ff.

FREUD'S EARLIEST THEORIES AND THE SCHOOL OF HELMHOLTZ

BY SIEGFRIED BERNFELD, PH.D. (SAN FRANCISCO)

Although Freud's early papers¹ are written for the most part in simple, untechnical language, and the expressions he coined (repression, defense) have an everyday sound, sometimes such obscure phrases occur as a 'quantity of excitation', 'discharge', 'detachment', and the like, which appear to be relics of the neurology of 1890.

Freud evidently alludes to a theory of which he has a high opinion, a theory from which many concepts of psychoanalysis are derived. Freud did not expound this theory beyond communicating the very general idea, 'that among the psychic functions there is something which should be differentiated (an amount of affect, a sum of excitation), something having all the attributes of a quantity—although we possess no means of measuring it—a something which is capable of increase, decrease, displacement and discharge, and which extends itself over the memory traces of an idea like an electric charge over the surface of the body. We can apply this hypothesis which, by the way, already underlies our [i.e., Breuer-Freud] theory of "abreaction", in the same sense as the physicist employs the conception of a fluid electric current. For the present it is justified by its utility in correlating and explaining diverse psychic conditions' (17, p. 75). Clearly he is dealing here with the nucleus of the 'economic standpoint' and of the 'psychic apparatus'.

A knowledge of the historical origins of Freud's theories should lead to a better understanding of them. The 'concept of the excitation which is discharged' is elaborately discussed in the *Studies in Hysteria* (7) as part of Breuer's contribution.²

¹ Coll. Papers, I.

² Chapter III. Theoretical Material. 2. Intracerebral Tonic Excitation.—The Affects.

It is therefore not reprinted in Freud's *Gesammelte Schriften* and is generally skipped by readers of the Studies. Nor is it easy reading; unlike Freud, Breuer's writings are closely tied to the terminology and thoughts of the physiology of his time. Our interest in the history of Freud's theories, however, compels us to consider the ideas of Breuer, his older friend and research partner. Fortunately, Breuer's theory without the technical terms of the time will have a somewhat modern look.

I. BREUER'S PRESENTATION³

The theory, as presented by Breuer falls naturally into three parts: (a) intracerebral tonic excitation (7, pp. 139-142); (b) the tendency to keep the excitation at a constant level (7, pp. 142-144); and (c) affects as disturbance of the dynamic equilibrium within the central nervous system (7, pp. 144-148).

A. *Intracerebral Excitation.*

'We should not imagine that a (conducting) cerebral path is like a telephone wire which is stimulated by electricity only when it functions. . . . Rather let us imagine an elaborate electrical system for the transmission of light and motive power which by a simple switch is to put into operation every bulb and motor. . . . Even during functional rest it requires a certain amount of tension in the whole conducting network, which in turn necessitates an expenditure of a definite sum of energy by the dynamo. Likewise there exists a certain amount of excitation in the . . . wakeful brain which is resting but ready to function.' To this excitation Breuer gives the (unhappy) name of 'tonic (intracerebral) excitation'. It exists in addition to (a) 'the potential energy, which is in the chemical composition of the cells' of the brain, and (b) 'that form of kinetic energy, unknown to us, which discharges in the state of excitation of the fiber . . . This tonic excitation relates to the discharge (e.g., in a peripheral motor fiber) . . . as electric tension relates to electric current.' (7, p. 140.)

³ This chapter is based on the German edition of the Studies (6), but the page quotations refer to Brill's translation (7). In using this translation I have made certain changes, without further comment and notification.

From this quotation we see that the theory contains two sets of thoughts: the neurological idea of an excitation, characterized as tonic, and localized in the conducting paths of the brain; and the physical concept of a certain amount of energy available for psychic work. The name 'intracerebral tonic excitation', as used by Breuer, takes the attention away from the physical meaning of the concept and unduly stresses the neurological aspect. 'Excitation' means the state of being in function. It is observable by its effects and is estimated accordingly as 'greater' or 'smaller'. However it is not measurable as is an amount of energy. The word is actually a qualitative term. Physiologists assumed, and still do assume, that the excitation is the result or indicator of energy exchanges. Since the relation between them is unknown, the cautious scientific language says 'excitation' but means 'energy'. At least it is so with Breuer.

Since we are interested in what Breuer 'means', and not in how he expresses himself in accord with his contemporary current scientific tradition, I shall bring the physical aspect out of the background in which Breuer kept it and shall restrict the neurological expressions to the fewest possible, and in such colloquial form as 'in the brain'. One can adopt this procedure with a clear scientific conscience. An observed excitation outranks a hypothetical energy; but the excitations Breuer speaks of are as hypothetical as the energies and so quite useless.

Thus Breuer's theory comes to this: A certain amount of the energies which the organism produces (or uses) in its physicochemical economy is available for its psychic functions. Breuer leaves the question open whether various forms or just one, and if so which one, of the energies within the organism's body is available for psychic activities. It is simply a certain amount characterized by its use only. It is made clear, however, that he is speaking of the intensity factor of the available energy, a potential, and not of the total amount of energy.

This energy is produced (released) by the brain cells during

sleep. When it increases above a certain level, the organism wakes up; it is ready for psychic work. It begins to perceive, associate, think and to produce motor innervations. In this way the store of energy is consumed. When it decreases below a certain level, the organism falls asleep and a new cycle begins.

During wakefulness the potential is increased in three ways: (1) the brain cells release energy, which is instantaneously consumed by the regular psychic functions. (2) The great physiological needs of the organism—hunger for oxygen and for nourishment, thirst, and sexuality—periodically increase the available energy. This excess of energy is consumed in actions which lead to gratification of the generated needs. (3) In perception, energies of the outer world increase the potential. This excess is consumed by associative integration.

In general, the amount of energy available for psychic work oscillates around an optimal level. If it decreases to a minimum, actions (sleep) occur restoring it; if it increases, such actions occur as to decrease it. Thus Breuer thinks of man's mind as of a self-regulating process, like breathing, depending upon the relative energy situation between brain cells, brain, body (glands) and the external world.

B. The Tendency to Preserve Intracerebral Excitation at a Constant Level.

Any engine or any system which shows restoration of a certain level of energy, force, or configuration, etc., can be described in teleological terms. A system of this kind becomes a unified whole; its actions are related to the level in question as 'disturbing' or 'restoring'. Within the whole they have a 'function', which is determinable. It works as if the preservation of level were a goal.

In Breuer's scheme psychic work consumes excess energy. Teleologically, one may say that psychic work has the function of consuming excess energy, of equalizing potentials, or that the organism has a tendency to keep the energy on a certain level. Breuer prefers to the term 'consumption of energy' the word 'discharge', which has a teleological connotation. The

German *Abfuhr* has perhaps an even stronger teleological tinge than the English 'discharge'.

But the tendency to preserve tonic excitation at a constant level is not merely a teleological translation of the law of dissipation of energy, according to which potentials, wherever they exist, will become equalized. To Breuer this tendency is a need of the organism, similar to others, for example to the tendency to preserve the level of the water content in the blood.

The aim of this need is to reduce the potentials to a certain optimal level at which the organism is in the state of mental alertness, of an all around readiness without upset or anxiety. Pain always originates when a need is frustrated; so pain ensues with the increase of the potential above the optimal level or, as Freud occasionally suggests (19), with a certain speed of such increase. When the potential falls below the optimum it is not the concern of this principle to bring it up again. This is done ultimately by the brain-cells as part of their life routine. This part of Breuer's theory in terms of today refers to molar (macro-) behavior of the (total) organism. It thinks of mind, let us say, as of the molar doing away with an accumulation of micro-tensions.

C. Affects and Conversion.

The affects are thought of as a disturbance of the dynamic equilibrium within the brain. We have to picture the brain as consisting of several areas. To each of these areas corresponds a certain complex of perceptions, ideas, motor patterns. If a certain amount of energy occupies one of them the complex is functioning. In the wakeful working brain the energy is not equally distributed. It is as if the available amount of energy was never sufficient to permit a number of different activities at the same time. Therefore it shifts from one area to another creating and equalizing potentials between them. A state of dynamic equilibrium is achieved when no major potentials exist between the areas and no obstacle hinders the passage of energy from one to the other, thus insuring a speedy equalization.

In emotional states this equilibrium is disturbed. A considerably increased potential is built up in one of the areas.⁴ The person is agitated, upset, in short, under the domination of an 'affective idea'. By an idea of this kind (in higher degrees of intensity) 'the flow of ideas is disturbed, the relative value of ideas is altered. . . . Perception . . . [and] the psychic elaboration of the sensations suffer'; the motility is changed 'until the excitement is discharged in the appropriate motor functions' (7, p. 146).

When a need, e.g., hunger or sexuality, creates such an affective state, there exists a definite appropriate motor function. Since an appropriate motor function of the affects proper—anger, grief, worry, fright—does not exist or is inhibited, the equalization is brought about by 'aimless' motor discharge. So simply is the puzzle of the expressions of emotions solved. 'They have no other aim than to equalize the increased excitation reestablishing the psychic equilibrium. To the degree that they do this, they serve the tendency to preserve a constant level of the intracerebral excitation. . . . However if the affect is altogether prevented from such a discharge it may produce anomalous reactions' (7, p. 147-148). One of these is the hysterical conversion.

This is explained by an elaboration of one of the ideas implied in the theory. Although the nervous system 'is a thoroughly connected entity . . . there are inserted strong, yet not insuperable resistances, which prevent the general and equalized distribution' of energy, e.g., 'the nervous apparatuses . . . of the circulation and of digestion are separated by strong resistances from the organs of ideation . . . they are not directly influenced by ideas'.

Under certain circumstances these resistances break down. This occurs where and when the resistance happens to be weak; when a high potential between some of the areas cannot be

⁴ Freud frequently speaks of the affects as of 'sums', because according to this view the affect is the result of a concentration of energy into one part of the system, equivalent to the amount which usually would suffice to occupy a number of them.

equalized either through associative activity or through motor discharge; or is too high to be sufficiently consumed. Such a breakdown of an isolation is the basis of conversion in hysteria. It is one of the pathological reactions to the undischarged affect.

Leaving aside the merits of the theory, we are impressed by its scope and consistency. However, many important details still remain too sketchy, not only in my fragmentary presentation, but in the elaborate original as well. Yet most readers will be less interested in these particulars than in the ambivalent feeling which this chapter may have created in them.

On the one hand it is obviously Breuer's theory to which Freud refers as 'our' explanation of the concept of discharge; the scattered remarks with which we opened this paper are clearly fragments of this theory. Freud amplifies it occasionally; and Breuer quotes Freud as author of the 'tendency to preserve the level of excitation'. Thus this theory has to be accepted as the view of Freud at that time.

On the other hand, although the arguments cannot be neatly enumerated one finds it difficult to fit this theory into the picture of the great psychologist who 'started his psychology as a conscious revolt against the barren pedantry that passed as neurology in the nineteenth century' (32, p. 170). It does not sound quite freudian. One is reluctant to attribute it to Freud even in his early cathartic years.

It may be that we have somewhat to revise our picture of Freud at that time. The traditional history of psychoanalysis starts with Charcot, the school of Nancy and Dr. Breuer's famous case. Freud was thirty when he met Charcot, not a student any longer, but a personality of definite scientific description; a *Privatdozent*, trained by Brücke and, in a broader sense, still an exponent of this school. In order to reconstruct his thoughts of 1893 we ought to know something of his precathartic years, especially his relation to Brücke and his school. Strangely, this relation has hardly been considered,⁵

⁵ To my knowledge only Dorer (11), Brun (10) and Jelliffe (27) have even touched upon this point.

although Freud calls Brücke the greatest authority which ever influenced him (24).

II. FREUD AND BRÜCKE⁶

In the sixties, that part of German university teaching which was held to be the most interesting, the most far reaching, and the most modern, was the physiology of the Helmholtz school. It fascinated the student of that time in somewhat the same way as atom smashing appeals to the imagination of the students of today. When Freud entered the medical school in Vienna in 1873, physiology still retained that spell. Though the movement had passed its peak the Physiological Institute of Brücke was still very active and famous, even glamorous.

The amazing success story of this scientific school started in the early forties with the friendship of Emil Du Bois-Reymond (1818-1896) and Ernst Brücke (1819-1892), soon joined by Hermann Helmholtz (1821-1894) and Carl Ludwig (1816-1895). From its very beginning this group was driven forward by a veritable spirit of crusade. In 1842 Du Bois wrote:

'Brücke and I pledged a solemn oath to put in power this truth: No other forces than the common physical chemical ones are active within the organism. In those cases which cannot at the time be explained by these forces one has either to find the specific way or form of their action by means of the physical mathematical method, or to assume new forces equal in dignity to the chemical physical forces inherent in matter, reducible to the force of attraction and repulsion' (12, p. 19).

⁶ The student of Freud's early papers and of his autobiographic writing, which are part of the training curriculum, is frequently puzzled by allusions to persons and events distant in space and time, and about which he would like to know more. But the sources are hard to get at. So I was tempted by my topic to give some of the information available only in books rarely consulted. The chapter grew to a length out of proportion to its function. And yet it falls far short of being a biography of Freud, even of the period 1873 to 1895. So I lay myself open to reproaches on two scores—I give too much and not enough.

These men formed a little private club which in 1845 they enlarged to the *Berliner Physikalische Gesellschaft*. Most of its members were young students of Johannes Müller—physicists and physiologists, banded together to destroy, once and for all, vitalism, the fundamental belief of their admired master. Strangely enough, Johannes Müller did not mind. On July 23, 1847, at the meeting of this society, Helmholtz read a paper on the principle of conservation of energy—with the modest purpose of giving a sound foundation to the new physiology. Thus unknowingly started the career of one of the leading physicists of the century. Du Bois, Brücke, Helmholtz and Ludwig remained lifelong friends. Within twenty-five or thirty years they achieved complete domination over the thinking of the German physiologists and medical teachers, gave intensive stimulus to science everywhere, and solved some of the old puzzles forever. As for vitalism—they lived long enough to see it rise again. However, in the seventies they and their physiology were a power not yet seriously challenged.

Brücke in Vienna, whom in Berlin they called 'our Ambassador to the Far East', in his classes kept very close to his elaborate notes. These, in 1874, he published as *Lectures in Physiology* (8). The first forty pages contain in substance the general ideas of the physical physiology which captivated young Freud.

Physiology is the science of organisms as such. Organisms differ from dead material wholes in action—machines—in possessing the faculty of assimilation but they are all phenomena of the physical world: systems of atoms, moved by forces, according to the principle of conservation of energy formulated by Helmholtz: the sum of forces (motive forces and potential forces) remains constant in every isolated system. The real causes are symbolized in science by the word 'force'. The less we know about them, the more kinds of forces do we distinguish: mechanical, electrical, magnetic forces, light, heat. Progress in knowledge reduces them to two: attraction and repulsion. This applies as well to the organism man. Contrary to Descartes, we cannot believe that the perpetual changes

which we experience and which happen to our ego are not the effect of external causes. Brücke then turns to an elaborate presentation in two volumes of what was then known about the transformation and interplay of physical forces in the living organism: 'which assist or inhibit one another, combine with one another, enter into compromises with one another, etc.' With those quoted words Freud describes in 1920 psychoanalysis from its dynamic standpoint (25, Vol. XVIII, p. 673). I do not know how better to describe the spirit and content of Brücke's Lectures. 5

This spirit was at work in the Physiological Institute, of which Freud was a member from 1876 to 1882. Brücke's assistants at that time, Sigmund Exner (1846-1925) and Ernst Fleischl von Marxow (1846-1891), both associate professors, were gifted men devoted to science and ardent physicalists.

Fleischl, whose friendship meant much to Freud, published papers on physics proper as well as on physiology, which, to his mind, was only applied physics and chemistry. Such an attitude seems to have run in his family. His uncle Czermak (1828-1873), one of the founders of laryngoscopy and rhinoscopy, had not only donated a magnificent physiological laboratory to the University of Leipzig, but had given a microscope to his nephew Ernst, then in high school. Ernst, generous in turn, let his schoolmate Exner share the benefits of this precious plaything.

Every student of medicine had to go through 'physiology' and none of the students who were at all interested in science got through it unscathed. On Freud it made a deep and lasting impression. After a few years of scattered and disappointing efforts in zoölogy and chemistry, he had settled down in the institute, fascinated by the 'great Brücke' and the 'brilliant Fleischl'. Though neither of them was a colorful personality, Freud recalls them as men 'whom I could respect and take as my models'.

Brücke was a small man with a large and impressive head, a balanced gait, and quiet, tightly controlled movements; small lipped, with the famous 'terrifying blue eyes', rather shy but

stern and exceedingly silent. A Protestant, and with his Prussian speech, he was almost cast into a minority group in Catholic Vienna. Fearful of drafts, he was never seen bareheaded; in the Institute he always wore a dark silk beret. He kept apart from his students, never discussing a paper or an idea before it was fully matured. A conscientious and an indefatigable worker, he was not *gemütlich* in his demands on others. Twenty years later in his dreams Freud could still tremble at the memory of how Brücke on his daily morning round had caught him being tardy. A student who in one of his papers had written: 'Superficial observation reveals . . .', had his paper returned with this objectionable line violently crossed out and Brücke's comment on the margin: 'One is not to observe superficially'. He was one of the most dreaded of examiners. If the candidate muffed the answer to his first question, Brücke sat out the remaining ten or twelve minutes of the prescribed examination period, stiff and silent, deaf to the pleas of the candidate and the dean. The general opinion had him labeled as a cold, purely rational man. What degree of violent force against himself and his emotions he needed to build up this front is revealed by his reaction to the death of his beloved son in 1873. He forbade his family and friends to mention his son's name, put all pictures of him out of sight, and worked even harder than before. But this man was completely free of vanity, intrigue, and lust for power. To the student who proved his ability he was like a most benevolent father, extending counsel and protection far beyond scientific matters. He respected the student's own ideas, encouraged original work and sponsored talents although they deviated considerably from his own opinions. It is said that no pupil or friend ever became unfaithful to him.

In many respects Fleischl was quite the opposite of Brücke. He was young, handsome, enthusiastic, a brilliant speaker, and an attractive teacher. He had the charming and amiable manners of old Viennese society, ever ready to discuss scientific and literary problems with a flow of challenging ideas. These qualities were in strange contrast to his pathetic part as hero

and martyr of physiology. At twenty-five while conducting research in pathological anatomy he contracted an infection. An amputation of the right thumb saved him from death. But continued growth of neuromas required repeated operations. His life became an unending torture of pain and of slowly approaching death. This mutilated and aching hand performed experimental work of technical perfection. His sleepless nights he used for studying physics and mathematics. When with his growing skill in the sciences this drug became ineffective, he began the study of Sanskrit.

To both these men science mattered more than private pains and worries, more than death. For them scientific work merges with life into one steady stream of activity. It becomes so much a part of one's self, that even ambition to contribute successfully to the growth of the science becomes less important than the growth itself—within limits, of course. But scientists of this type display noticeably less vanity than is the characteristic mean of the profession. If that was the way of life which preconsciously Freud had devised for himself, then the teachers in the Physiological Institute were indeed fit models.

Josef Breuer too was true to this type. Freud met him at the Institute, where he might often be found. In most presentations of psychoanalysis Breuer is labeled 'a practicing physician in Vienna'. But he was much more than that. Breuer (1842-1925) was trained in Brücke's Institute, became a scientist and thinker of quality and a strong believer in the 'physicalistic' physiology. As he confessed in a letter to the philosopher Franz Brentano: 'I have a brain lesion—ametaphysia'. After his graduation in 1867 he became assistant to Oppolzer at the Clinic for Internal Medicine, University of Vienna; in 1868 he became a *Privatdozent*. In 1871 he turned to private practice but continued teaching at the University until 1885. (During Freud's college years he lectured on diseases of the kidneys and of the digestive apparatus.) He published few but rather important studies, some of them now considered to be classics. In 1868 he discovered the self-regulation of expiration and inspiration by the vagus nerve. In

the years 1873 to 1875 he discovered the function of the semicircular canals in the labyrinth of the ear and the function of the otoliths, and established their exact mechanism by experiments.⁷ He conducted these experiments in his own house in his spare time, generally at night. In 1894 at the suggestion of Mach, Hering, and Exner, he was elected corresponding member of the Academy of Sciences in Vienna. In 1907 he published a monograph on the hearing organ of birds, and experiments on the direction and posture of fishes under the influence of the galvanic current. As a medical practitioner he gained uncommon admiration and confidence. He was physician and medical consultant to Brücke, Exner, Fleischl, Billroth, Chrobak, and many other bigwigs of the then very famous Vienna medical school.

In addition to the settling and attractive force of these personalities an 'elective affinity' was driving Freud into the school of Brücke. In half a dozen years Freud recapitulated ontogenetically, to speak in the darwinian terms dear to young Freud, the phylogeny of thought of the preceding seventy years.

This 'physiology' was a part of the general trend of western civilization. Slowly, continuously, it had been coming up everywhere through the preceding two or three hundred years, steadily gaining momentum from the end of the eighteenth century and increasing rapidly in velocity and expansion after the thirties. In Germany it had an additional emphasis, a special emotional coloring. This trend, weaker here than in England and France, was interrupted from about 1794 to 1830 (from the great to the little French revolution) by the period of *Naturphilosophie* (philosophy of nature).

Naturphilosophie is the name of the pantheistic monism, close to mysticism, which, professed by Schelling, repeated, developed and varied by a host of writers, was eagerly accepted by the average educated man and literary ladies. The Universe, Nature, is one vast organism; ultimately consisting of forces, of activities, of creations, of emergences—(all these!)

⁷ Both these discoveries were made at the same time and independently by Ernst Mach and a part of them by Crum Brown.

organized in eternal basic conflicts, in polarity; reason, conscious life, mind, being only the reflection, the emanation, of this unconscious turmoil. These ideas have been expressed before and since, and contain the seeds of some of the scientific theories of the nineteenth century and of our time. But it is not the ideas which are characteristic of the movement nor the romantic temper which envelops them. This was a general European trend. What characterizes the German *Naturphilosophie* is the aspiration expressed in the name 'speculative physics' (which Schelling himself gave to his endeavors) and the unbalanced, megalomaniac emotionalism of the fantasy and of the style of these writers. Fechner praised 'the gigantic audacity' of Oken, a prominent representative, while a sober English historian puts it thus: 'They exhibit tendencies that seem foreign to the course of European thought; they recall the vague spaciousness of the East and its reflection in the semi-oriental Alexandria' (3, p. 129).

'Physicalistic' physiology—although not by itself—overthrew philosophy and took its place. As has happened before, the conqueror introjected the emotionalism of his victim. 'Unity of science', 'science', 'physical forces' were not merely directing ideas or hypotheses of scientific endeavor; they became almost objects of worship. They were more than methods of research—they became a *Weltanschauung*. The intensity of this temper varied from scientist to scientist, from place to place. In Berlin with Du Bois-Reymond it was at the maximum, strangely mixed with Prussian nationalism. In Austria, *Naturphilosophie* never had much power, and the physiology fanaticism was at a minimum in Vienna and with Brücke. Yet it was there.

It was through an enthusiasm for *Naturphilosophie* that Freud came to the 'physicalistic' physiology of Brücke. Shortly before his graduation from the *Gymnasium* (high school), early in the summer of 1873, 'it was hearing Goethe's beautiful essay on Nature read aloud at a popular lecture by Prof. Carl Brühl that decided him to become a medical student' (22). It was not medicine he was after. He was not interested in the activities of the physician, and not impressed by his social

position. Becoming a doctor was no ideal, it rather meant a defense against his ambition to play a leading part in politics, which temptation derived from childhood dreams of identification with Hannibal, General Masséna, and Oliver Cromwell. Joining the medical school simply was the only realistic way of studying the sciences of nature. All the leaders of the 'physicalistic' physiology were M.D.'s who like Brücke and Du Bois-Reymond never in their lives treated a patient, or who like Helmholtz for a brief early period reluctantly served as physicians.

Goethe, who determined this choice, is a pioneer of *Naturphilosophie*—in his scientific essays (and in this field only) is himself a *Naturphilosoph*, though a moderate and a balanced one. The 'short incomparably beautiful essay on nature' (20, p. 420) is a sort of program of the early spirit of the German *Naturphilosophie*.⁸

As was the case with Goethe and later with the generation of Schelling, in Freud's mind too the pantheistic feeling came after the God of his childhood had lost power over his thinking, but nevertheless persisted as a lifelong object of thought. The parallel becomes ridiculously complete when we learn that Freud in his early enthusiasm for the 'physicalistic' physiology swung for a brief period into radical materialism (20, p. 271). This reaction against mystical idealism, or any sort of romantic philosophy, had started a generation before Freud, and Büchner, Vogt and Moleschott around 1870 were still alarmingly popular among the less sophisticated.

From the beginning Freud's interest in this physiology was not a passive one. He carried through research to the full satisfaction of Brücke who read some of Freud's papers before the Academy of Science. He became a demonstrator at the Institute (a kind of teaching assistant). He had every right to count on becoming Brücke's assistant. Having in mind research as a career he was in no hurry to finish his medical curriculum. Submerged in study and research without any

⁸ An English translation of this essay is contained in Wittels's volume (36); selected paragraphs occur in Simmel's paper (33).

other wishes or conflicts, he passed the seven happiest years of his youth in Brücke's Institute.

When Freud left the institute for private practice he did not give up his scientific aspirations. During the next ten years he changed neither topic nor method. In a way he never has changed them. In spite of the new revolutionary features of psychoanalysis, its core is a continuation of the work that Freud did for Brücke.

The topic to which Brücke drew Freud's attention was the central nervous system, or in other words, psychology as it was understood in the Institute. Here in the seventies the microscopic and the experimental approaches were still united. True, the physiological experiment (including the biophysics and biochemistry of today) was and became even more completely the *via regia*, and some physiologists indulged in contempt of the microscopist. Not so Brücke. He continued to announce his classes in the lingo of the Vienna University as Physiology and Higher Anatomy. The knowledge of the spatial structure of that 'physical system in action' is as necessary as the knowledge of the forces playing on this apparatus, changing or reproducing it. This structure is to be revealed by the microscope. In Brücke's mind there was no opposition between anatomy and physiology, between microscope and experiment. This was the approach which had made famous his first work on the structure of the cell ('the elementary organism').

With this belief the student Freud did a large amount of valuable microscopic research during his years with Brücke and continued to do so as resident of the *Allgemeines Krankenhaus*, where he started his preparations for private practice.⁹ Clinical research in neurology gradually took the place of anatomical studies. Even after he met Charcot and while he treated cathartically, clinical neurology was like neuro-anatomy, only a part of 'physicalistic' physiology. Clinical observations, though made by the unaided eye and the ear were material useful for revealing the structure and the

⁹ Brun (10) enumerates (and evaluates) thirty precathartic papers by Freud.

dynamics of the brain—or more generally as one had put it in the naïve heyday of biology—of the machine-man.

One conclusive bit of evidence is the monograph on Aphasia (16) which, dedicated to Breuer, appeared in 1891. This little known book is the first 'freudian' book with all the precious simplicity of style, lucidity of presentation and tantalizing hiding of ideas, as if the reader were as passionate a detective as the writer. Freud criticizes severely the then current theories based on brain anatomy, as promoted by Meynert, Wernicke, and others. But that is not because he conceives a psychology and psychopathology 'without brain'. On the contrary, his own theory is strictly 'physicalistic'. It is in basic agreement with Exner and Paneth,¹⁰ and partly inspired by them. He appreciates the ideas of Hughlings Jackson, at that time almost unnoticed or decried as a 'bed-lamite theorist'. He uses the data of clinical observation, including dissection and psychology, as clues to the structure and working of the brain. In his opinion the localizationists neglect dynamics—that is why he stresses forces as opposed to loci—and still worse they have a wrong idea about the structure of the centers which they discovered. His theory is only sketched, and it would be presumptive to state that it is the same theory that Breuer developed a few years later in the Studies. However, they have a striking resemblance.

It was Brücke who sat Freud at the microscope—hardly against his will. Notwithstanding the fact that psychoanalytic procedure is logically equivalent to experimentation, Freud never experimented (with the exception of the famous cocaine episode). His method was to look and listen passively, with a minimum of interference with the object. He quickly gave up the use of electrical machinery and then hypnosis because he felt clumsy and uneasy in the use of such coarsely interfering activity. Governing, curing, educating—he repeatedly confessed having no inclination for these. He liked to compare psychoanalysis to the work of the archaeologist, who only

¹⁰ Joseph Paneth (1857–1890), Freud's early deceased friend and successor in the Institute, appears as 'friend Joseph' in the *Interpretation of Dreams*.

removes the sediments of the ages and finds what was hidden beneath.

At seventy-four Freud said on a solemn occasion: 'My life work was aimed at one goal only: to deduce or to guess how the psychic apparatus is constructed and what forces interplay and counteract in it' (23). He refers here to his psychoanalytic work. But as we now see, this statement embraces all his scientific efforts, back to his first research concerning certain nerve cells of a strange and rare fish. It reaches even farther back. The topic of that lecture by Prof. Brühl—so decisive—at which Goethe's poem was recited, was comparative anatomy (13).

III. THE EARLIEST OF FREUD'S THEORIES

The facts related in the preceding chapter dispel any doubts as to Freud's relation to the theory presented by Breuer. It is conceived in the spirit of the 'physicalistic' physiology, in complete accordance with Freud's earlier thinking, and represents Freud's ideas at the time of his collaboration with Breuer. The theory was evolved and formulated in many vivid discussions between the two men. It is Freud's as well as Breuer's.

A short paper (4) written in longhand by Freud in November 1892, but not published until 1940, proves this assumption concretely and establishes the continuity in Freud's thinking from the Fragment on Nature, or at least from his neuroanatomical papers, up to the Studies in Hysteria. The title of this paper is On the Theory of the Hysterical Attack, by Dr. J. Breuer and Dr. Sigm. Freud. Obviously intended as the first account of the work of Breuer and Freud, for unknown reasons it was substituted by the Preliminary Communication (5) written in December 1892 and published in 1893. All of the Theory of the Hysterical Attack became a part of the Preliminary Communication, with the exception of the concluding paragraph, which gives a precise though short outline of the theory, presented by Breuer in an elaborate form three years later in the Studies.

Why Breuer and Freud eliminated every allusion to this

theory from their first publication, why Freud left to Breuer its elaborate presentation in their book, and why he restricted himself to brief allusions in his own early papers, is not known. However we cannot infer a change of mind between 1892 and 1895, since much later Freud incorporated this early theory into psychoanalysis, as its economic standpoint. This occasionally, for instance in 1925, he even defines in Breuer's terms when he says, 'the purpose of the mental apparatus [is] to keep as low as possible the total amount of the excitations to which it is subject' (25). Repeatedly (for instance in 1923 and 1925) Freud draws attention to Breuer's theoretical chapter in the *Studies*, stresses the importance of these thoughts for the future development of psychoanalysis, and regrets that they have not been used more exhaustively (21, 23). In 1923, heckled about some contradictions in his early papers by a young member of the Psychoanalytic Society in Vienna¹¹ Freud said: 'This problem exists only because thirty years ago I wrote quite candidly, not foreseeing that at some future time every detail would be accepted and made sacrosanct to the last letter'. Then he continued clarifying the meaning of the concept of affects as sums of excitation and by no means disclaiming it.

The history of this theory after 1895 need not concern us here; the few remarks above about Freud's later attitude serve only to strengthen the conclusion of this study, which can be summarized thus:

Faced with the wealth of new facts which the cathartic studies daily were producing, Freud introduced a number of new concepts: repression, defense, abreaction. They were well suited to organize the new material and to integrate it into the naïve and scientific knowledge previously achieved. They have withstood the test of many years of varied research and have proved to be adjustable to new facts, applications, and development. But to Freud they were only descriptive terms. They did not explain the facts but were themselves in need of an explanation—a truly 'physicalistic' aspiration. Freud

¹¹ Meeting of January 31, 1923. Copy of the minutes in my files.

never reached what to him seemed to be a final and complete explanation. He tried various approaches. Psychoanalytic theories so-called, as distinct from psychoanalytic discoveries and inventions, are the sum of these various freudian efforts at scientific explanation.

His earliest theory is strictly in the spirit of the 'physicalistic' physiology. It is ambitious and covers a much broader field than merely the abreaction of dammed-up emotions. It considers the whole organism, consisting of body, brain, brain cells and environment and potentials of physical energy between them, tending, as such potentials ought to, towards final equalization. Needs, emotions, sleep, wakeful purposive behavior, etc., are all thought of as definite energy situations, determined by the amount and the direction of the potential, and by the systems between which the potentials exist. For example: perceptions are connected with a potential between outer world and brain; emotions with potentials within the brain; hunger, sexuality and similar needs with a potential between body and brain. The behavior of the person, external and internal, direct and symbolic, conscious and unconscious, is in the last analysis directed by the (macro) need to remove in appropriate ways the (micro) accumulation of energy produced by the metabolism of the brain cells. All behavior is carried on with energies available by the potentials thus created. If appropriate actions do not exist or are inhibited the person will have to invent substitutes or have recourse to improper ones, which may well have the character of abnormalities, especially of neurotic symptoms.

REFERENCES

1. BENEDIKT, MORITZ: *Aus meinem Leben*. Wien: C. Konegen, 1906.
2. BORUTTAU, HEINRICH: *Emil Du Bois-Reymond*. Wien: Rikola Verlag, 1922.
3. BRETT, GEORGE SIDNEY: *A History of Psychology*. Vol. III. London: G. Allen & Co., 1921.
4. BREUER, JOSEF, AND FREUD: (1892) *Zur Theorie des hysterischen Anfalles*. Int. Ztschr. f. Ps. u. Imago, XXV, 1940, pp. 107-110.
5. ———: (1893) *Über den psychischen Mechanismus hysterischer Phänomene*. Vorläufige Mitteilung. Ges. Schr. I. (Eng. Trans. in 7.)

6. ———: (1895) *Studien über Hysterie*. Wien und Leipzig: Verlag F. Deuticke, 1895.
7. ———: (1895) *Studies in Hysteria*. Trans. A. A. Brill. New York: Nervous and Mental Disease Monograph Series No. 61, 1936.
8. BRÜCKE, ERNST: *Vorlesungen über Physiologie*. 2 vols. Wien: W. Braumüller, 1874.
9. BRÜCKE, ERNST THEODOR: *Ernst Brücke*. Wien: J. Springer, 1928.
10. BRUN, R.: *Sigmund Freuds Leistungen auf dem Gebiet der organischen Neurologie*. Schweiz. Arch. f. Neurol. u. Psychiat., XXXVII, 1936, pp. 200, ff.
11. DORER, M.: *Historische Grundlagen der Psychoanalyse*. Leipzig: F. Meiner, 1932.
12. DU BOIS-REYMOND, ESTELLE: *Zwei grosse Naturforscher des 19. Jahrhunderts. Ein Briefwechsel zwischen Emil Du Bois-Reymond und Karl Ludwig*. Leipzig: J. A. Barth, 1927.
13. EISENBERG, LUDWIG: *Das geistige Wien*. Künstler u. Schriftsteller Lexicon, 2. Bd. Mediz.-naturw. Theil. Wien, 1893.
14. EXNER, SIGMUND: *Biographische Skizze*. (In 15).
15. FLEISCHL, ERNST VON MARXOW: *Gesammelte Abhandlungen*. Hsg. Otto Fleischl v. Marxow. Leipzig, 1893.
16. FREUD: (1891) *Zur Auffassung der Aphasien. Eine kritische Studie*. Wien & Leipzig: Verlag F. Deuticke, 1891.
17. ———: (1894) *The Defense Neuro-Psychoses*. Trans. John Rickman. Coll. Papers I, p. 59.
18. ———: (1895) *The Justification for Detaching from Neurasthenia a Particular Symptom Syndrome: The Anxiety Neuroses*. Trans. John Rickman. Coll. Papers, I, p. 76.
19. ———: (1895) *A Reply to Criticisms on the Anxiety Neuroses*. Coll. Papers, I, p. 107.
20. ———: (1900) *The Interpretation of Dreams*. Trans. A. A. Brill. In: *The Basic Writings of Sigmund Freud*. New York: The Modern Library, 1938.
21. ———: (1922) 'Psychoanalyse' und 'Libidotheorie'. Ges. Schr. XI, p. 201.
22. ———: (1925) *Autobiography*. Trans. James Strachey. New York: W. W. Norton & Co., 1935.
23. ———: (1925) *Josef Breuer*. Int. Ztschr. f. Ps., XI, pp. 255-256.
24. ———: (1927) *Concluding Remarks on Lay Analysis*. Int. J. Ps., XIII, 1927, p. 392.
25. ———: (1929) 'Psychoanalysis' in *Encyclopedia Britannica*, 14th edition, 1929.
26. ———: (1930) *Ansprache im Frankfurter Goethe-Haus*. Ges. Schr. XII, p. 408.
27. JELLIFFE, SMITH ELY: *Sigmund Freud as a Neurologist*. J. Ment. & Nerv. Dis., LXXXV, 1937.
28. KOENIGSBERGER, LEO: *Hermann v. Helmholtz*. 3 vols. Oxford, 1906.
29. LAZARUS, MORITZ: *Lebenserinnerungen*. Bearbeitet v. Nahida Lazarus u. Alfred Leicht. Berlin, 1906.

30. LORENZ, ADOLF: *Autobiographie*. In: *Medizin der Gegenwart in Selbstdarstellungen*. Vol. 3. Leipzig: F. Meiner, 1923-1927.
31. MEYER, HANS HORST: *Josef Breuer, 1843-1925*. In: *Neues Österreichische Biographie*. 1815-1918. Erste Abteilung. V. Bd. Wien, 1928.
32. RITCHIE, A. D.: *The Natural History of Mind*. Tarner Lectures, Cambridge, 1935. London: Longmans, Green & Co., 1936.
33. SIMMEL, ERNST: *Sigmund Freud: The Man and His Work*. This QUARTERLY, IX, 1940, p. 163.
34. WIEN, UNIVERSITÄT: *Geschichte der Wiener Universität von 1848 bis 1898*. Hsg. v. Akad. Senat d. Wiener Univ. Wien, 1898.
35. WIEN, UNIVERSITÄT: *Vorlesungskataloge*.
36. WITTELS, FRITZ: *Freud and His Time*. New York: H. Liveright, 1931.

BOOK REVIEWS

SADISMO Y MASOQUISMO EN LA CONDUCTA. (Sadism and Masochism in Behavior.) By Angel Garma. Buenos Aires: El Ateneo, 1943. 208 pp.

This new volume in the Argentine *Biblioteca de Psicoanálisis* logically follows Garma's three previous, more or less elementary, works, in that it focuses upon certain aspects of aggression, whether internally or externally directed. The subject matter is divided into sections on war, suicide and the obsessive neurosis, followed by a quasi postscript psychography of the imagist poet, Arthur Rimbaud. There is thus an appeal to various groups of readers: to those interested in the psychology of social phenomena, to the clinician, and to a larger 'cultured' lay public.

Garma's choice of war as the introductory topic is didactically a happy one, for it makes plausible, as nothing else could, the view of Freud in his letter to Einstein. The rather lengthy section on suicide provides the author an easy phenomenon—illustrated by a wealth of material from clinical practice and belles lettres—on which to demonstrate the mechanisms discovered by Freud and others. His treatment is original in emphasizing more than most treatises on the subject, the aim of regaining the love object in the 'beyond'. The relevant mechanisms are clearly set forth in several diagrams. On the other hand the phenomenon of introjection and its attendant effects is rather underplayed.

By this time the reader is prepared to understand the rôle of sadism and masochism, and the defenses against them, in the obsessive neurosis. The straightforward method which Garma employs in the exposition of this neurosis has the merit of logical development, and judged from this point of view, it is successful. A more historical presentation might have lacked all the lucidity which Garma displays; yet it might have revealed why Freud stated that this 'most interesting and grateful subject of analytic investigation' is 'a problem still unsolved'.

The study of Rimbaud, the brilliant young psychopath, whose career as a poet was so precocious, so sensational and so brief, furnishes ample evidence of the rôle of murderous and suicidal impulses as they expressed themselves in his life course, in his per-

sonality traits (largely neurotic ones) and in his letters. This study might profitably be compared with the one by Edmund Wilson in *Axel's Castle*, in which the influence of Rimbaud on contemporary literature is expounded.

This book is handsomely got up, with many excellent plates and illustrations.

B. D. L.

EMOTIONS AND MEMORY. By David Rapaport, Ph.D. Menninger Clinic Monograph Series No. 2. Baltimore: Williams & Wilkins Company, 1942. 282 pp.

The author of this monograph has with great scholarship collected an overwhelming number of facts, experimental data, theories and speculations from the vast literature of physiology, experimental and theoretical psychology, psychoanalysis and psychiatry. In addition to this valuable survey of the literature, which brings together in one volume many different schools of thought, the author undertakes to contribute his own theory for a solution of the problem as to where to place the concepts of emotion and memory in a general system of psychological functions. His ability to think himself into different schools of thought (except the physiological) provides him with a springboard for a remarkable approach. He accepts Freud's concept of drives as the basic psychological force and assumes that when these lead to an unconscious conflict they find discharge through channels other than voluntary activity such as (1) 'emotional expression', (2) 'emotion felt'; through subjective emotional experiences which include not only the 'genuine' emotions described in textbooks (rage, fear) but a 'hierarchy' of emotions ranging from those which are mild, conventionalized, and intellectualized, to the most intensive and primitive (p. 37, and pp. 101, ff.). Memory is not a storehouse of deposited engrams but the 'stratification of a multiplicity of dynamic fields in which every experience enters into relations with the related experiences on the varied levels of stratification. Thus there is no dividing line between memory and thinking: the same stratifying connecting and organizing influences [the emotional factors] which are active in thinking are at work in the memory organization; and this . . . makes memory one . . . aspect of the organization of thought processes' (p. 102).

The author's assumption that thinking and memory are kin-

dred phenomena, which are based on the individual's present and former emotional reactions to a given set of internal and external stimuli, follows easily from the basic fact that thinking as well as memory in all its functions (registration, retention, and recall) serve the purpose of orientation. They are activities which supplement and amplify the most elementary orienting activity, perception.

Recently¹ I tried to show that perception is possible only if a subjective quality of pleasure or pain is experienced in conjunction with the objective data which stimulate the (external and internal) sense organs. In a subsequent paper² I have further elaborated on the concept that pleasure and pain are not 'principles' (whatever a principle may be) but result from the relationship between external stimuli and the internal stimuli which are the subjective expressions of actual bodily needs. If an external stimulus (food) accords with an internal stimulus (hunger), the subjective sensation will be a pleasant one; if the stimuli conflict, the sensation which characterizes the perception will be disagreeable or painful. Pleasurable and painful sensations are the factors which 'organize' perception, make it 'meaningful'. There are no neutral perceptions because stimuli which might lead to perception are simply not registered if they do not elicit at least a minimum of agreeableness or disagreeableness. The anticipation of a future situation, with its set of external and internal stimuli eliciting certain pleasurable or painful sensations, not only 'organizes' the perception of that situation but also reactivates, and thus includes in the perception, the sensual images of past perceptions. Those images are no 'engrams' in the mechanistic sense, but functions of cortical areas which generally adjoin the pertinent sensual areas.

Thus it seems that it is the agreement or disagreement between external (objective) and internal (subjective) stimuli which finds expression in the pleasantness or unpleasantness of an experience and which furnishes those 'stratifying, connecting and organizing' influences which direct memory as well as thought processes. It is, I will add, an oriented integration of present and past experiences which makes the anticipation of future experiences possible.

¹ Herold, Carl M.: *Critical Analysis of the Elements of Psychic Functions*. This QUARTERLY, X, 1941, pp. 513-544; XI, 1942, pp. 59-82 and pp. 187-210.

² Herold, Carl M.: *Pleasure Principle and Drive Theory in Reference to Psychophysiology*. To be published in This QUARTERLY.

Where this reviewer disagrees with the author is that what seems to him 'the direct expression' of dynamic drive processes³ seems to me to be the dynamic interplay between external (objective) and internal (subjective) stimuli. Harmony or disharmony resulting from such a set of stimuli leads to integrated and oriented reactions of the individual or the reverse. In the field of sensual perception we experience it as pleasure and pain; in the field of imagery (presentations) as pleasant or unpleasant emotions; in the field of word representations as knowledge (pleasant) or confusion (unpleasant). We do not need such a mystical concept as drive to develop a dynamic theory of emotions and memory. The drive concept makes the motivation of behavior entirely internal and concedes only modifying functions to reality. It creates great difficulties in explaining extreme modifications which seem to have reversed the assumed original drive goals to their opposites. In the dynamic theory of the interplay between external and internal stimuli, behavior is the outcome of the material history of organized and organizing living substance in its surroundings. In principle, both the growth of the embryo 'according to plan', and the most subtle effort of a scientist's brain to solve a problem, are reactions based on orientation of sensitive living substance. The compass for this orientation on all three levels of reality presentation (sensual perception, emotional experience, intellectual understanding) is always the same: pleasure and pain.

This view of the origin of psychic functions is closely related to the doctrines of unconditioned and conditioned reflexes; it only adds the pleasure principle to which it gives the directing rôle in organizing the reflexes.⁴ Rapaport refused to include the theory of conditioned reflexes in his survey on the ground that 'the gap is still unbridged between emotional experience and its observable physiological and behavioral manifestations' in animal experimentation. Being concerned only with the influence of the subjective 'delicate entity called emotional factor', Rapaport neglects to consider Pavlov's reflexology and all other animal experimentation. Two other objections which Rapaport makes to Pavlov's theory

³ The author does not make the necessary distinction between 'instinct' and 'drive'. Cf. footnote 1, *loc. cit.*

⁴ On the higher levels of integration 'organized reaction' is preferable to 'reflex'. Once the pleasure-pain principle is seen to be the organizing factor the objectionable mechanistic implications of 'reflex' are removed.

of conditioned reflexes are first, the artificial conditions to which the experimental animals are subjected; second, that memory has something to do with learning and that the exact relation between learning and conditioning is unsolved.

The first objection follows the argument of E. Straus who admits that Pavlov's description of the reactions of experimental animals is adequate but believes his conclusions were arbitrary postulates because the animals were experimented with under unnatural conditions. This conclusion is unscientific. Isolated kidneys on which physiologists experimented, exploring many important functions, were certainly functioning under no more 'unnatural' conditions than Pavlov's dogs. A much more compelling objection to Pavlov's descriptions is that they did not include an evaluation of the biological needs of the starved animals, that he considered only the external stimuli which he applied and not the internal ones which also existed. Had he admitted to his historical considerations the dog's 'desire' for food, his exclusively mechanistic theory would have been essentially modified and the 'elusive emotional factor' would have found its place in his investigations. Instead of omitting Pavlov from his survey, Rapaport would have gained far more by criticizing him constructively than by discussing many other rather futile 'contributions' of experimental psychology which do little more than enhance his scholarship.

The relationship between learning and conditioning Rapaport considers unsolved. He quotes Finch and Culler who say that 'in the learning process repetition supports remembering; but in the process of conditioning, repetition of the conditioned response without the unconditioned stimulus results in extinction' (p. 258). This is an awkward formulation. What is meant is that a dog 'loses' a conditioned reflex to a chosen conditioning stimulus if the latter is not reënforced from time to time by offering the dog food. Such an amateurish argument is indeed rare even in psychological literature. By consistent reënforcement of a chosen stimulus with food a dog 'learns' that a repeated stimulus 'means' food, and salivates in anticipation of it. If the experimenter then applies the same conditioning stimulus but consistently omits the food to reënforce it, the dog 'learns' that its anticipation of food is an error which leads to frustration; that the conditioning stimulus no longer 'means' food. This 'extinction' of a conditioned reflex (deconditioning) is also a process of learning just as any 'unlearn-

ing' is, and not merely as Pavlov formulated it an extinction which may have the merely negative implications of 'forgetting'. This demonstrates what a wealth of psychological material is buried in Pavlov's experiments if one is not obsessed by the fear of being anthropomorphic.

This applies to all objections to psychological evaluations of animal experimentation. Pavlov's dogs with experimentally produced 'neuroses', Jacobson's chimpanzee and its reactions to failures in delayed reaction tests, certainly show such distinct emotional reactions that it requires a most compelling fear on the part of the experimenter against becoming anthropomorphic to refuse to consider the evidence just because the animal cannot tell him about it. The psychotherapist knows how unreliable verbal descriptions of emotions are and relies much more on his observations of a patient's emotional behavior. Why should we not rely upon observations of emotions in animals where we clearly can observe them, even though the animal cannot 'talk'; moreover the animal does not purposely deceive us as human beings often do. Rapaport, quoting Masserman in another connection, prints Masserman's observation that animals with extensive hypothalamic lesions react to emotional stresses and can apparently experience genuine affective states. It is presumed that Masserman did not converse with his animals, but is courageous enough to draw conclusions from what he observes. He is one of the few to admit observations of the emotional behavior of animals to scientific research. Dumb animals give less equivocal answers to intelligent experimental 'questions' than do intelligent human beings to less intelligent questionnaires, association studies, and memory experiments to which Rapaport devotes so much space.

Rapaport, starting from the gestalt psychological insight that there is only a qualitative difference between remembering, problem solving, and discovering, proposes to go further and to recognize that thought processes, of which memory is only one, although the most important 'aspect' (p. 102), are not only 'meaningful organizations' but are also directed by 'strivings'. Thus 'meaningful-logical organization' is only a special case of 'emotional-affective' organization (p. 136). He suggests a theory of memory 'centered in emotional-affective organizing factors' (p. 137). This means, practically, that emotional factors are at work not only, as Freud showed, in repressing and disorganizing memory,

but also in organizing it. This is a very important contribution which eliminates the traditional antithesis of subjective feeling and objective thinking, and which points at the subjective source and character of the most sublimely 'objective' thinking. This is the same point of view I proposed in discussing reality testing,⁵ calling the subjective factor not 'emotion' but 'pleasure and pain'. Emotions 'felt' are not mystical 'manifestations' of equally mystical 'drives', but the pleasant or painful sensations which are caused by *activities* including imagining, remembering and thinking. Emotional expression is either added activity (e.g. mimic gestures) or a modification of the original activity by pleasant or painful sensation. I believe we shall abandon the mystical 'drive' concept which explains nothing and accept the pleasure-pain principle as the motivating factor which represents the relationship among the various needs of the organs of the body, including the nervous system, to reality.

It is unfortunate that Rapaport takes as his point of departure the weakest point in Freud's system: the drive concept. It certainly does not serve any purpose to 'explain' an unknown emotion as a 'direct manifestation' of an equally unknown 'drive'.

The importance of the subject has prompted this detailed discussion and criticism, some of which I hope is constructive. With over six hundred titles surveyed, it is a good reference book for students of psychology but with the regrettable omission of all experimental psychology with animals which the student must find elsewhere. The theoretical view that emotional factors not only interfere with but also organize memory and thinking is fully appreciated. The physiological aspect of the subject is considered only briefly and unsatisfactorily. In general this huge and heroic compilation of material from so many sources leaves one with a feeling of vague emptiness and futility. The master idea which would organize and synthesize the material into a cohesive unity is lacking. There is too much smoke and too little fire.

CARL M. HEROLD (NEW YORK)

BEHAVIOR AND NEUROSIS. By Jules H. Masserman. Chicago: The University of Chicago Press, 1943. 269 pp.

When Pavlov and his co-workers began their investigations into conditioned reflexes in dogs, a revolution was occurring in the

⁵ Cf. footnote 1, *loc. cit.*, Chapter IX.

biological and psychological sciences. Jacques Loeb was beginning to revise his mechanistic assumptions in the light of his brilliant researches and was soon to emerge with his concept of the organism-as-a-whole. Hans Driesch, studying embryos, was fast becoming an out-and-out vitalist, and Freud had already achieved his epoch-making insights into the purposive aspects of human behavior. But Pavlov did not like revolutions, political or scientific, and spent almost forty years undeviatingly piecing together a nervous system reflex by reflex. How the Russian school of physiologists, dominated by the mechanistic prejudices of their great leader, managed to stay clear of the holism emerging from the coalescing trends elsewhere to be seen in the biological and psychological research of the day, remains a marvel of scientific isolationism. The result, in any case, was a reflexology of such baroque involvedness that despite the best efforts of clinical psychiatrists and psychoanalysts to translate the grammar of this system into something applicable to the problems of psychopathology—and despite the later efforts of Pavlov himself to effect this liaison—nothing was accomplished beyond a vague promise of wonders to come. It was this awkward state of affairs that led Schilder a few years ago to write: 'We cannot interpret the neurosis by means of the conditioned reflex, but by means of the psychic mechanism we have studied in the neurosis we can well explain what occurs in the conditioned reflex.'

The applicability of Schilder's remark is born out by the results of Masserman's experiments with cats, described in this book. Masserman undertook to study the 'total' behavior of cats instead of limiting himself to the observation of isolated, discrete reflexes. His methods were based entirely on the assumptions drawn from comparative psychobiological and psychoanalytic researches that behavior was an expression of the needs of the organism, that it was purposive, adaptive, and could be interpreted only in terms of an environmental field rendered meaningful by those needs. Viewed in the light of these assumptions, the data of conditioning make a good deal of sense.

Thus it was found that when the biological needs of the cat became conflictive, as for instance, when an experimental impasse between hunger and fear was created, the animal's adaptation became perforce symbolically substitutive, ambivalent, regressive, compulsive, inefficient—in short, 'neurotic'. Experiments were con-

ducted to demonstrate factors tending to accentuate the neurotic behavior (as, for instance, an increase in the intensity of one of the conflictive drives) while other experiments were designed to investigate factors alleviating such neurotic behavior (forcing a solution, manipulation and working through, transference persuasion and social example).

So far, the net effect of these experiments has been to demonstrate that the cat, as it were, is only human after all. As far as the applicability of this work to the problems of psychopathology goes, nothing has emerged that is not already to be found in the solid precipitate of clinical psychiatric and psychoanalytic knowledge which has developed gradually around the nucleus of Freud's dynamic insights. What has been demonstrated so far is *why* conditioning occurs. What remains to be demonstrated—and demonstrated in a way that integrates just as relevantly with the existing totality of psychobiological knowledge—is precisely what concerned Pavlov: *how* conditioning occurs. It is to be hoped that in terms of the groundwork already laid down, it will be possible by pursuing this question to shed some light on the perplexing problems of 'constitution', differential adaptation, and the limits of deconditioning therapy. If studies of the type described by Masserman could be supplemented and controlled by studies of the genetic type as performed by J. McVickers Hunt and those by Alexander Wolf on selective inhibition, it is likely that the investigation of a great many problems could be carried far beyond the point where we are forced to stop in our analytic and experimental work with humans.

Masserman's book is scholarly and well written. Its three main parts are: I. Rationale, Methods And Experimental Results. II. Readings in the Literature on Experimental Studies of Behavior and Neurosis. III. Clinical and Psychotherapeutic Applications. There is a bibliography of several hundred titles and an author and subject index.

JULE EISENBUD (NEW YORK)

BEYOND PSYCHOLOGY. By Otto Rank. Published privately, 1941. 291 pp.

According to the foreword, this work was intended to be Otto Rank's last. He did not live to complete the final chapter. The book grew out of 'the appreciation of the influence ideologies exert

upon human behavior in determining the destinies of people'. The author's *Seelenglaube und Psychologie*, published in 1930, offers a background for the present work. In that publication the thesis is elaborated that individual psychology is shaped and determined not by 'blind biological impulses' but by powerful collective ideologies 'which originated beyond the individual and did not spring from an understanding of the self'. By ideologies 'beyond the individual', the author does not mean collective or social psychology, but 'the irrational basis of human nature which lies beyond any psychology, individual or collective'. The book enters a plea for the recognition and acceptance of this irrational element as the most vital part of human emotional life.

In the opening chapter, *Psychology and Social Change*, it is stated that a dilemma is presented by the question whether a change in people or a change in systems of living offers a better method for improving human conditions. The system of education in a society is dependent upon which of these changes the emphasis is placed on. Progressive educators have made the individual's capacity to change the primary goal of present day education. Of late, under threat of foreign ideologies, educators have had to 're-define the ideal of individualism'. The emphasis had to be shifted toward a fostering of democratic values and away from those of the 'child-centered' school. The democratic society tries to change people so that they may achieve a better life within the social system; the totalitarian state tries to adjust people to a change of the system itself with the promise of ultimate advantage to the individual. The first principle is called evolutionary, the second revolutionary.

The author reviews what he calls 'the rapid rise and decline of our own psychological era', in the period of comparative stability before the war. Freud, he says, approached a scientific psychology of morbid persons suffering 'in a presumably healthy civilization', with all the emphasis upon the development of the individual personality. Experience gained in the therapeutic process was elaborated into a general theory which was claimed to be of universal applicability in understanding behavior. The author, however, feels that Freud discredited the whole psychoanalytic movement by eventually realizing that he was 'not dealing with neurotic individuals but with a morbid civilization'. Rank states he was led to an interest in a 'psychology of difference' because of his con-

viction that Freud's psychology 'did not even permit individuals of the same race and social background to deviate from the accepted type', and because of the question of the validity of his interpretation for all races (Jung) and its inapplicability to different social environments (Adler). He feels that the origin of warfare and revolutionary struggle lies in man's desire for personal immortality rather than biological survival. Nationalism represents a form of individualized immortality. A leader can rationalize the irrational ideologies of immortality underlying warfare and revolution in terms of an intelligible ideology and thus channel the forces inherent in the irrational strivings of the masses. Revolution stems from a natural division of society based on the inherent inequality in human beings which is not dependent upon economic realities or political ideologies. The more creative people become leaders who produce social change by promulgating some powerful ideology.

During the latter part of the past century a 'conceited intellectual type emerged . . . priding himself on having revealed the secret of nature and thus being able to master her'. Belief in God is thus replaced by the worship of the Goddess of Science. The ideal of democratic equality is derived from the political ideology of the self-sufficient homogeneous lower middle class. The maintenance of this ideal of equality, as represented in American democracy, involves a great deal of regimentation. Therapeutic psychology, as well as education, promise individual development but demand adjustment to the environment. Self-development and adjustment rarely go together. The author seems to think that he is stating a proposition contrary to our modern conceptions of psychotherapy in saying, 'I conceive of human help for the individual not as a planned method of psychotherapeutic techniques with respect to a control of his stimuli and responses but as his experiencing of the irrational forces within himself which he has not heretofore dared to express spontaneously. Such a conception, however, does not mean giving free range to the hidden desires of the ego, but rather permits the individual to accept inner limitations or outer restrictions in his own terms and on his free volition.' The underlying issue of deterministic versus vitalistic points of view is offered by the author as the basis of his disagreement with Freud. The individual's will is the most constructive factor in the therapeutic movement, not the 'will' in the sense of Nietzsche and Adler, nor

'wish' in the freudian sense, but 'an autonomous organizing force in the individual which does not represent any particular biological impulse or social drive but constitutes the creative expression of the total personality and distinguishes one individual from another. This individual will, as the united and balancing force between impulses and inhibition, is the decisive psychological factor in human behavior' (p. 50).

Rank describes 'this individual will' in terms of man's need to preserve his individuality and particularly to maintain his belief in his immortality. The interesting chapters, *The Double as Immortal Self*, *The Emergence of the Social Self*, and *Kingship and Magical Participation*, elaborate the concept of a need for immortality which is finally expressed in a 'kind of collective immortality' represented in social organization. This begins with totemism, and develops into a social participation which is 'the collective counterpart of psychological identification.' The creation and 'decay' of our modern type of personality is epitomized in the development of Christianity which combines the three possible solutions of the problem of succession or immortality: the magical solution of primitive man, in the concept of 'The Double' (eventually Soul), the intellectual solution of Greek civilization (the disciple as successor), and the Roman, in which the biological father-son succession comes into its own. The concept that the individual personality type is always derived from an outstanding personality deviating from the average is strongly emphasized. Thus the personality of Paul determined the influence of Christianity upon our present civilization, his theology creating a new conception of love. Rank contrasts Christian mercy and love with the righteousness of Jewish theology: 'For the Jewish religion, being essentially pessimistic, is a philosophy of hate . . . because it springs . . . from a deep-rooted self-hatred in the Jew' (p. 191).

Totalitarian movements, according to Rank, have already fulfilled a great cultural mission by awakening the 'saturated and self-satisfied democracies' to a revaluation of their fundamental principles. The need for a truly religious ideology does not spring from the necessity to cope with the impact of 'secular religious' (i.e. Communism, Fascism) upon democratic ideology. This need, the author states, is inherent in human nature and its fulfilment necessary in any kind of social life.

Rank states that feminine psychology is a 'mystery', not only to

man, but to woman herself: 'a secret which, by her very nature, she is never tempted to penetrate or to give away—except in living, which can never be grasped by psychological knowledge but only by human understanding'. Here for once, he turns away from his usual minimization of biological forces in the determination of personality and states that 'man's whole personality is built up ideologically, that is, is more abstract, while woman's personality, based as it is on a sound biological foundation, is quite concrete' (p. 259). He regards the 'masochistic woman' as an invention of decadent, sadistic man, but regards woman's submissiveness to her biological rôle (not to man) as a basic part of her personality. The sacrificial rôle is deeply rooted in woman's nature and is 'not just a masochistic perversion in the sense of our psychology'.

The final chapter begins with an evaluation of 'our psychological age,' *Psychology Beyond the Self*, which states the weakness, as Rank sees it, of Freud's position; the futility of individual psychotherapy since the whole of civilization is seen as ill, the condemnation of our civilization by Freud 'for its failure to follow through his system of thought and reform', the presumptuousness and naïveté of 'the idea of simply removing human guilt by explaining it casually as "neurotic"'. Almost two thirds of this final chapter is devoted to a criticism of Freud's psychology as, primarily, an expression of Jewish tradition and mentality. The 'Jewish type, as we know him' developed the concept of the chosen people to make his suffering endurable in Babylonian exile. Jews in exile take on what Nietzsche calls 'slave-morality', and complicate the civilizations to which they are exposed by 'borrowing' the culture of the victor while the latter borrows that of the Jew. 'From this symbolic life of the Jew in *civilizations contrary to his makeup and foreign to his mentality*, there follows, in spite of all the emphasis on difference as manifested in anti-Semitism, a mutual assimilation of characteristics *fatal to both parties* and above all to the general psychology emerging from this state of affairs' (p. 282). The Jew who really takes on characteristics of his host becomes neurotic because 'these do not fit him'. The host becomes neurotic in taking on what appear to be useful characteristics of the Jew.

In adopting psychoanalytic ideology the 'degenerate man of Western civilization' accepted a psychology foreign to his own 'as a convenient justification for his exhausted instincts inhibited by guilt . . . We come here upon the strangest paradox of cultural

sympiosis, a state of affairs in which one type of people accepts as genuine the psychology of another type—diametrically different from it—as a therapeutic ideology, and this therapeutic ideology is then proclaimed to be the general psychology of both types, indeed of mankind, regardless of time and place.’ It is then Rank’s fantasy that Freud’s conception of neurosis is a projection of the Jew’s position in present day civilization, and he concludes that ‘the specific Jewish psychology, expressed in freudian doctrine as a general psychology, is projected in toto upon the woman, who therefore is depicted as enslaved, inferior, castrated, where in the psychology of the male the masculine qualities appear exaggerated to the point of caricature in a libidinal superman’ (p. 287).

These quotations speak for themselves. Criticism, except in the author’s own words, is difficult and superfluous. By his own statement he is not a scientist. In fact he deplores a ‘scientific’ approach to the understanding of personality.

The brilliant author of *The Myth of the Birth of the Hero* is at his best in those chapters based upon his penetrating studies of the origins of social institutions. Here his interpretations and insights can be appreciated on their merits, and they reflect his erudition and his inventive, imaginative mentality. But the final chapter of his final book (apparently he did not write all of this chapter although it is published as his) reflects neither scientific, social nor humanitarian understanding of ‘our current psychological area’, and it presents an appalling conception of the problem of minority groups. The explanation of Rank’s opinions is to be found in the history of his life, and calls for an authentic and sympathetic biography.

The last chapter of this book is an illuminating document with reference to totalitarian ideologies and the current hostilities of men toward men. Fortunately Rank’s place in psychology will not rest upon this posthumous work, but on his earlier brilliant efforts. But the harsh fact remains that while in Nazi Germany book-burnings persist, ‘Beyond Psychology’ will be welcomed on the shelves of the libraries of the Third Reich.

GEORGE J. MOHR (CHICAGO)

PSYCHIATRY IN WAR. By Emilio Mira, M.D. New York: W. W. Norton and Company, Inc., 1943. 196 pp.

This book would have had a truer title if Dr. Mira had called it *Psychiatry at the Fighting Front*, or *Psychiatry in the Spanish War*.

For, though its contents are not strictly so limited, it tells the tale of the Spaniards, suddenly deprived of their army by Franco's revolt, organizing a new army of *milicianos*, who like our revolutionary Minute Men seized whatever weapons came to hand to wage an unexpected war. Psychiatry also had to meet this sudden emergency. Dr. Mira, then Professor of Psychiatry at Barcelona, was in charge of the psychiatric work in the Republican Army. It is interesting to read how he and his colleagues met the occasion. Not only did they have to diagnose and treat as well as they could the mental casualties in the armed forces, but in addition they had to care for the morale of the soldiers and civilians. Much of the book relates the practical steps taken to meet the various situations. A 'psychodiagnostic test' ('myokinetic psychodiagnosis') was devised that gave them a rough and ready rating of mental health and personality traits. This test the author values highly; unfortunately his records remained in Spain when he fled. Simple ways of dealing with everyday psychiatric problems were instituted. Civilians and soldiers alike were given mental hygiene education. Unstable men were isolated; certain drugs were used as sedatives. Rules were adopted to detect malingering. Other rules were discovered to handle the problems of discharge and rehabilitation. And in the author's mind arose reflections concerning the possible use of psychiatry in a postwar period, which alas, he could not test in practice.

For evident reasons, Dr. Mira could not compare the measures he had instituted for the differential selection of officers with those of other armies. However, he has given a review of certain procedures in use in Germany, and what he has to tell us is reassuring. Either the Nazis are vague and academic or they are not revealing what they are doing. In any case they do not seem to have any bright ideas. From his experiences the author is led to a descriptive classification of the emotions as he has encountered them in wartime. He recognizes several varieties and degrees of fear and anger, comments on them from a viewpoint not entirely out of line with analytic conceptions, and seems impressed by the views of Kardiner and Rado on combat neuroses. All in all the picture is very different from the ones we get from our camps and bases, except from those that have received combat casualties. But Dr. Mira's experiences are first hand and his report is instructive and well worth reading.

PSYCHOLOGY FOR THE FIGHTING MAN. Washington, D. C.: The Infantry Journal. New York: Penguin Books, Inc., 1943. 456 pp.

This little volume is an excellent work. It is written in the style of a compendium and is composed of a series of interrelated chapters on all aspects of psychology, both as the subject deals with the physiology of the special sense organs and various psychiatric aspects, normal and abnormal, of the soldier. There are fifty-nine collaborators and the work is a boiled-down essence of the opinions and concepts of the various writers regarding these very broad considerations. It is very well written and up to date. Many of the chapters, particularly those on the psychology of the special sense organs, contain the essential material included in various Army Training Manuals on the subjects.

The material is concentrated and of great value to the soldier in terms of life preservation, effectiveness in his daily duty, and satisfaction with his life in the army. Although apparently written for the soldier, it is so full of carefully gathered and condensed material that it is the reviewer's feeling that the average soldier would not be able to digest the book without some outside help. It really takes a trained mind, with at least a high school education, to understand it despite the fact that it is not written in a technical manner. However, it should prove invaluable as a reference for officers and the more enlightened noncommissioned officers. Through these channels its contents could be relayed to the 'fighting man', for certainly indoctrination of its contents into the minds of the soldiers would aid greatly in making an effective, hard hitting, and 'savvy' army.

The scope of the material goes far beyond that of the interest of the soldier and includes much of interest to people in civilian life. The topics covered are so protean that it might well be used as a text in teaching college psychology. For instance, the chapters on the physiology of the special sense organs, although definitely oriented to the effective use of these in war, are so clearly descriptive that they provide an excellent medium for the understanding of these functions in their routine daily expressions. It would be difficult to find a more clearly written work, outside of a medical text book, for this purpose.

The first chapter deals with the nature of the human being

and his relation to the weapons of war, so-called Psychologic and Material Logistics and their interrelationships. Wars are won by the effective use of human and materiel logistics. The importance of the qualities of each when properly fitted to each other are discussed and considered from the standpoint of their effective use for the task at hand. The next six chapters deal with the physiology of the special sense organs.

Chapter eight deals with classification and the principles on which the army uses psychologic knowledge to fit the man with his skills and aptitudes most effectively into the proper job. The lay person will be impressed by the size and scope of this problem which faced the army personnel department at the outbreak of the war.

Three chapters follow dealing with methods of teaching and training manpower for duties in mechanized warfare. This is an excellent transcript of the so-called 'training-in-job' method which has been used so effectively in the development of our present war industries.

Chapter thirteen, on morale, is good, although at this point more stress might well be laid on the importance of leadership as the number one factor in the creation and maintenance of morale in fighting units. The factor of identification is implicitly touched upon but an explicit statement of its true meaning would have increased the effectiveness of this chapter. Fear is dealt with in an open and frank manner by explaining that fear and cowardice are quite distinct entities and the normal man usually experiences fear in the danger situations of battle. Such psychologic 'armoring' of soldiers for battle experience has proved to be a most effective means of gaining mastery of fears at this time.

The next chapter deals with somatic needs and reactions to these in the army situation and is done in an enlightened, humane, and broad-minded manner. One sees wise use of modern dynamic psychiatry in the points of view expressed.

A clear cut, intelligent presentation of sexuality and its normal aspects and expressions are given, followed by a brief discussion of perverse tendencies and perversion.

The next chapter, on the soldier's personal adjustment, is an excellent discussion of the demands made upon the individual by the needs of the army and the danger signals which appear when

the individual is unable to meet these demands. The ideas of modern mental hygiene are well represented here.

A chapter on leadership covers this subject in a broad and forthright way. The meaning of discipline and obedience and its necessity if lives are to be spared in battle is brought out. The leader and his essential qualities and the reactions of soldiers to men with or without such qualities is presented. No army officer would go wrong in following the paths surveyed in this chapter.

In chapter seventeen, on *The Mob*, there is the statement on page 386, 'Men in a mob act just as much in keeping with their past training and habits as if they were alone'. This statement is obviously wrong and is later denied on page 388: 'Since a mob is driven by a powerful emotion it is necessarily crazy to do something'. The need for action in mob psychology on a level far below that dictated by individual intelligence is clearly brought out. It is difficult to understand how the first statement crept into the volume, but in view of the fact that this erroneous impression is so well corrected, one should not be too critical.

The chapter on rumor describes the origin of rumor and the dangers inherent for those who accept such statements as facts without further confirmation.

It would have been proper for the authors of this volume to pay at least a passing tribute to modern dynamic psychiatry for its valuable contributions to many of the essential chapters of the work. One recalls the quotation of Freud, when he spoke of those 'who warm their soup at the fires of freudian doctrine', and yet pay no respect to those who are its essential originators and contributors. However, this is indeed a small matter as one is essentially concerned with the quality of the flame which burns in the lamp of human knowledge. It is a valuable book for one's library.

JOHN M. MURRAY (WASHINGTON, D. C.)

DRIVES TOWARD WAR. By Edward C. Tolman. New York: D. Appleton-Century Co., Inc., 1942. 118 pp.

The author, a professor of psychology at the University of California, attempts in this short book to analyze the nature of war and its psychological causes and to provide a method for the prevention of its recurrence. In an interesting foreword he relates the development of his strong pacifistic orientation. His thesis is

that former ages have stressed limited and secondary areas of man's total personality such as spirituality, intellect and economics. The time has come for a new ideology or myth about the nature of man which Professor Tolman proposes to call *The Psychologically Adjusted Man*. In this myth is encompassed 'the understanding of man's total psychology with the resultant balanced satisfaction of all his absolutely necessary psychological needs leading to relatively universal individual happiness and welfare'.

He begins by reporting experiments on laboratory animals dealing with some of the basic biological drives. One noteworthy feature about this presentation is the differentiation of the drives into appetites and aversions. Tolman says that the former are set off by internal metabolic conditions; the latter—of which aggression is one—by evoking environmental situations such as injury, obstruction, isolation.

This is followed by a chapter on the social techniques of the same animals. He lists four major types of social techniques: self-assertive, self-abusive, collective and collective-assertive.

From this point the exposition makes two leaps from the experimental animal to the human individual and society. First, by analogy, the four types of social techniques among the animals observed are correlated with different types of human society. The second jump leaves the laboratory animal and leads to a discussion of some of the classical ego defenses first described by Freud. The purpose of this is to demonstrate their function in the conversion of biological drives, or in mediating between biological drives and the various social techniques.

Thus when drives are frustrated the possibility of two types of war is created. On one route, self-assertive techniques lead through repression to self-abusive techniques and repressed hostility. Identification (with the group) and projection result in aggression against outsiders, or war of the neurotic variety. On the other hand, when the collective techniques are frustrated the aggression against attacking enemies of the group may lead to non-neurotic, defensive war.

In the final section, *Psychologically Adjusted Man* and *The Abolition of War*, specific prescriptions for a future world are elaborated. They may be expressed in this formula: an emphasis upon the primacy of the biological drives; the necessity of a moderate amount of self-assertion and an increasing amount of col-

lectivity; the importance of an easy identification with parents; a redirection of drives to produce a minimum of self-abasement and the accompanying repression; redirection of group loyalties into more useful and less harmful channels; some form of what William James called 'the moral equivalent of war'.

These general principles are to be implemented with what the author calls 'three practical devices': (1) evolving an economic order which appears to be a cross between capitalism and socialism; (2) inventing an educational and social system which encourages and makes possible easy identification with parents or other acceptable images; (3) creating a supernatural state which will everywhere claim a loyalty primary to narrower national loyalties. This state the author would invest with much libidinal value.

One cannot differ seriously with Tolman's desideratum as it seems to go a long way toward promoting a civilization with firmer roots and toward establishing a basis for the moral equivalent of war, the two prescriptions offered by such thinkers as Freud and William James. Here is a book for the general reader written by an academic psychologist who gives adequate recognition to the primary importance of the instinctual life of man, not alone as a basis for psychological adjustment, but also for a warless, more humane world. The psychoanalyst will note with pleasure the fruit from his own garden. However, the discussion of the ego defense mechanisms could be expressed in much clearer language. Perhaps the psychoanalyst will not like the rather dogmatic nihilism regarding the evidence about instinctual drives from human experience. The laboratory experiment, particularly the so-called controlled experiment, seemingly remains for the author the last word in scientific proof.

Tolman is pessimistic about his prescription which he calls a utopian dream. He feels that an alternative 'dark night of savagery [will] once again . . . descend upon all humankind'. It seems that his apparent disbelief in the efficacy of his own rational prescription is explainable by his inability to face the nature of aggression squarely, the nub of the whole problem of war and its prevention. Although he classifies aggression among the biological drives he minimizes its power and pervasiveness by calling it one of the aversions, or 'needs against', set off, not by 'internal metabolic conditions', but by environmental situations such as obstruction. Destructive aggression is much more than an 'environmentally

conditioned getting away from an actual or threatened state of internal sufferance'. It stems from the tremendous power of all the constructive (aggressive) energy at the disposal of one or all the biological drives, set off by the 'internal metabolic conditions', and the possibilities for frustration of any or all of these drives from both internal and external causes are present always and everywhere. Hence the rather frightening prospect of the imminence of destructive aggression and its great disproportion to the strength of the stimulus-obstruction. This great force is doubtless what frightens the pacifist into its denial or repression. Hence the frequent fallacy of the pacifist who would substitute for force without law, law without force, or with inadequate force. There is abundant evidence in the book that this is the author's deepest bias. 'An extreme and even neurotic disgust with and horror of war . . . to be killed or even to be mutilated in battle . . . is so horrible to me that in all my thinking about the causes, the nature or the ends of war, I have consciously to try to keep my inner eye closed against any too concrete images of what war as such actually means.' One can sympathize with such a confession of fear, productive as it can be of zeal, but conscious self-blinding is hardly a recommendation for an adequate survey of causes or cures of anything. No wonder the author would deal with those who glorify war for its own sake in the manner of the college debater: 'They are certainly as entitled to their biases as I am to mine'. Why not a little civilized aggression, well directed?

I. PETER GLAUBER (NEW YORK)

WAR AND CHILDREN. By Anna Freud and Dorothy T. Burlingham.
New York: Medical War Books, 1943. 191 pp.

In this book, Anna Freud and Dorothy Burlingham attempt to show some of the effects of war upon the children they have cared for in their three nurseries. It is an admirable piece of work, not only for its contribution to the study of children, but for its description of the tremendous task performed by the authors during the London 'blitz'. In addition to establishing these nurseries, they treated children, trained teachers, made psychological studies, and managed to find time to send monthly reports to the United States.

The book is divided into two parts, the first dealing with psychological conclusions, and the second, case histories made up from

the reports. It might have been easier for the reader had the material been arranged differently; it is somewhat repetitious and lacks the necessary footnotes relating the psychological conclusions to the case histories.

There are three important conclusions which can be drawn from these reports, the first is psychological in nature, the second and third are practical.

The first conclusion is that those children who experienced bombings *with* their not-too-anxious parents or substitute parents were apparently less affected than those who were separated from their parents, either by accident or by evacuation. (The authors did not conclude, however, that children should not be evacuated, and have suggested a plan which is presented later on.)

The psychological explanation for this conclusion is based on the following assumption (pp. 21-22):

'It is a common misunderstanding of the child's nature which leads people to suppose that children will be saddened by the sight of destruction and aggression. . . . They are passing through a stage of development where destruction and aggression play one of the leading parts. . . . At this time of life destructive and aggressive impulses are still at work in children in a manner in which they only recur in grown-up life when they are let loose for the purpose of war.'

The authors explain that the destructive impulses within the child need to be counterbalanced by the parents' love and education. 'The impulse will be directed away from their primitive aim in "doing harm", in other words, to "do good" instead of "being bad" as the original impulse demanded.'

We all know that young children are destructive and aggressive, but the illustrations of aggression given by the authors do not seem conclusive. They say,

' . . . Children between the ages of one and two years when put into a play pen will bite each other, pull each other's hair and steal each other's toys without regard for the other child's unhappiness. . . . if we observe young children at play we notice that they will destroy their toys, pull off the arms and legs of their dolls. . . . '

It is with this description of aggression in young children that they determine what effect the present war conditions may have upon a child, so that 'instead of turning away from them in instinctive horror, as people seem to expect, the child may turn toward them with primitive excitement'.

In putting the interpretation of purposeful destruction on children's play, the intention may be confused with the effect. What the children's aim is, we only can guess, as at that age (between one and two years) they are destructive as well as constructive. They are eager to explore but due to their poor muscular coördination, and inability to express themselves in words, they are unable to use materials as adults expect them to. This inability to handle objects efficiently may result in destruction more often than is intended.

In describing the dramatic play of older children, the authors explain the repetition of aggressive actions, as an indication that the children are overwhelmed by their destructive tendencies. That is, of course, a mechanism well-known to analysts, but some of the supporting evidence they give may be misleading. To illustrate this point they tell about the children using broken material from bombed areas in their dramatic play. The fact that they use it—regardless of the content of the play—was an indication to the authors that the children were overwhelmed by their destructive tendencies. Here again they have not discussed the other possibility that this type of play could also be an expression of the child's need to explore with whatever material is at hand, for we know that children who have not been exposed to shock will use any material they find, either in the street or home, constructively. The other object of such play, which is the attempt to master fear through active repetition, is discussed in the following chapter on air raid anxiety.

The most important chapter from the psychological point of view is the discussion of Five Types of Air Raid Anxiety. The first three types, real anxiety, fear of instinct and fear of conscience, are well known to us. The fourth stems from identification of the child with its mother.

'A child in the infant stage of one, two, three, and four years of age will shake and tremble with the anxiety of its mother, and this anxiety will impart itself the more thoroughly to the child the younger it is' (p. 32).

The fifth type shows us that under the impact of the loss of a beloved object the child develops a neurosis in which there is a compulsive repetition of the frightening experience.

'The fear of air raids assumes completely different dimensions in those children who have lost their fathers as a result of bombing' (p. 35).

There are two practical conclusions, which may be understood as suggestions. First, in the nursery where children are separated from parents, it is advisable to divide the children into small 'family' groups with an adult acting as a substitute mother. This change was not initiated until 1942, although it is the basis on which nursery schools in America have been operating for many years. The second practical conclusion is based on the authors' experiences with children who have been separated from their parents and shows that '... It is not so much the fact of separation to which the child reacts abnormally, as the form in which the separation has taken place' (p. 84).

The authors show that the child experiences shock when it is suddenly and without preparation exposed to danger with which it cannot cope emotionally. From this they do not conclude that children must not be separated from their parents, or evacuated during bombings, but that methods can be devised whereby the separation can be effected less precipitously.

'There are so many obvious reasons why small children should not stay in London shelters that it is not easy to pay equal attention to the emotional reaction of the child against evacuation' (p. 44).

'That evacuation under present conditions is as upsetting as bombing itself is no proof yet that methods of evacuation could not be found which guard the child's life and bodily health, and at the same time provide the possibility for normal psychological development and steady progress in education' (p. 84).

'One could conceive a plan under which all small children would be collected in day nurseries. They would get attached to their nurses and teachers, and know the units in which they spend their days while they still live at home. In time of danger these nurseries would be converted into residential nurseries and would be evacuated collectively' (pp. 86-87).

This book will be extremely valuable to all who work with children, and should be of special assistance to teachers, social workers and pediatricians who care for children suffering from mishandling in situations of adoption, foster home placement, camp and boarding school.

EDITH ENTENMAN (NEW YORK)

CHILDREN'S BEHAVIOR PROBLEMS. Volume II. Relative Importance and Interrelations Among Traits. By Luton Ackerson. Chicago: The University of Chicago Press, 1942. 570 pp.

Children's Behavior Problems is a statistical study of hundreds of children's cases examined consecutively at the Illinois Institute for Juvenile Research to investigate the causal factors underlying undesirable behavior manifestations.

The principle of multiple causality is the basis on which the author has proceeded. It was assumed that behavior traits are correlated with a large number of possible etiological factors, either inherent in the child or arising in his environment, and that these contributing factors are of differing degrees of etiological potency. The behavior traits studied were chosen on the basis of how frequently they were noted, rather than according to any current belief concerning their relative importance.

The author feels that effective methods of treatment have often been discovered by chance, with little understanding of etiology. It seems to have been his hope that this extensive statistical study of the correlations between traits and possible etiological factors might lead directly to the development of practical methods of treatment or prevention, even though a complete knowledge of the underlying causal mechanisms is lacking.

Dr. Ackerson has undertaken a tremendous task which will undoubtedly interest those who work with statistics.

EDITH ENTENMAN (NEW YORK)

THE GREEN CIRCLE. By Chris Massie. New York: Random House, 1943. 280 pp.

EQUINOX. By Allan Seager. New York: Simon and Schuster, 1943. 408 pp.

Each of these books has to do with the thoughts and actions of a schizophrenic. In *The Green Circle*, Massie tells a fast-moving, delightfully confusing story of the first hours of a man's life after his discharge from a mental hospital. The man stumbles upon a murder, a beautiful woman, and himself, and the book is concerned with the attempt to resolve these three problems. It is a good story, well told.

Allan Seager's *Equinox* tells of an 'amateur psychologist' and

his careful meddling in the lives of other people. It is rather unfortunate that the author thought it best to say that the 'psychologist' had been analyzed, for it is quite outside the realm of possibility that Henry Verplanck, as Seager describes him, could have completed an analysis.

This is a book that is brilliant in its highlights but quite distressing in its overall content. The world is not quite so devoid of the 'normal' as Mr. Seager would have us believe.

MARGARET N. STONE (NEW YORK)

ABSTRACTS

A Counting Compulsion. Leo H. Bartemeier. *Int. J. Psa.*, XXII, 1941, pp. 301-309.

Bartemeier's paper contains an interesting analysis of a counting compulsion which was highly overdetermined. Counting meant first the measuring of time which was necessary for defense purposes. Secondly, it meant the creating of time. The analysis of the details of the compulsion made the interrelationship of the meanings of defense and satisfaction especially clear: counting was necessary as a protection against anal-sadistic drives while at the same time it served to discharge them.

OTTO FENICHEL

Symposium on Neurotic Disturbances of Sleep. *Int. J. Psa.*, XXIII, 1942, pp. 49-68.

After a short introduction by Otto Fenichel, Emanuel Windholz presents an outline of the multiplicity of problems involved in the neurotic disturbances of sleep and makes some practical suggestions as to how they may be approached. The problem of sleep disturbances is identical with the problem of tension created by a conflict with repressed wishes, because the state of sleep creates a relative weakness of the ego and a relative strength of those wishes. The state of sleep also brings about a regression to the primary narcissism of the suckling. Persons with oral fixations are either inclined to enjoy especially the body feeling of this narcissistic state, or else they have to fight it. The first attitude may lead to a libidization of sleep and a craving for it; the second attitude, however, creates sleeplessness. In melancholia sleep may have the same significance as eating, and therefore the same conflicts are valid for sleeping as for eating.

Christine Olden presents a report of two cases of neurotic insomnia. Anxiety from repressed infantile fantasies kept the patients under tension. One patient showed such a tremendous castration fear that she could keep it under control only by staying awake. Frances Deri describes a somewhat unusual sleep disturbance: a 'wake-hour' from two to three in the morning, which disappeared after the patient had worked through the 'primal scene' material. Anna Maenchen gives a sketchy outline of the psychoanalytic literature concerning sleep and also some of her own case material.

In a kind of summary Otto Fenichel recapitulates the problem of the neurotic disturbances of sleep as a whole. The impossibility of complete relaxation because of sleep disturbances is connected with a person clinging to certain cathexes. The ego fears the state of sleep because it knows that the repressed impulses will try to become manifest. The curtailment of ego function is feared as a loss of the ego's censorship over the instincts and at the same time as a minor death or castration—the terrible consequence of instinctual activities.

In an extremely interesting and stimulating paper Ernst Simmel broadens the topic of sleep disturbances and includes observations and opinions about

the process of going to sleep and awakening. Schizophrenia, for instance, may be viewed as a disturbance on a grand scale of the waking condition. The psychotic ego seems to want only sleep and tends to regress to a prenatal condition. People in twilight states, as well as in somnambulistic states, are actually acting out unconscious masturbation fantasies. In these cases external reality becomes part of the dreamer's inner psychic reality. In epileptic seizures the ego probably tries to protect itself not only against erotic but also against suppressed or repressed aggressive instinctual demands. The sleep disturbances of drug addicts are probably explained by the fact that these people after the withdrawal of the drug give up the autoerotic narcissistic possibilities of consuming their destructive energies during the day and are therefore obliged to assign this extra task to the narcissistic condition of sleep during the night. To accomplish this they have to take sleeping medicine.

MARTIN GROTJAHN

Psychic Defense and the Technique of Its Analysis. Edoardo Weiss. *Int. J. Ps.*, XXIII, 1942, pp. 69-80.

In this paper Weiss discusses the sources and mechanisms of the various methods of defense and the factors which are effective in their analysis. He stresses the difficulty of drawing a definite line between ego and id and he uses Federn's conception of 'ego boundaries' and their displaceability as a theoretical explanation of observable facts. Weiss's basic theoretical conceptions, however, are not always the same as those generally accepted. He talks, for example, about qualitatively different ego and id cathexes of mental strivings, and of 'destrudo' as the moving force of the death instinct. He values so highly the so-called 'functional phenomenon' (Silberer) in his dream analyses that his conceptions become very similar to those of Jung, a similarity which he himself recognizes and acknowledges.

OTTO FENICHEL

On the Unconscious Significance of Perfume. John Pratt. *Int. J. Ps.*, XXIII, 1942, pp. 80-84.

The first purpose of perfume is certainly to hide natural body odors. Paradoxically, the popular perfumes of all nations contain elements with odors similar to sweat, urine or faecal odors. Psychoanalysis can easily explain this paradox: perfumes express the conflict surrounding body odors. They simultaneously hide and stress (in a distorted form) these odors. Details of the ways in which perfumes are used show the great olfactory-excretory erotic interest in their use. Pratt's remarks about the magic of incorporation of odors (breathing) are especially interesting (Cf. Fenichel, Otto: *Über respiratorische Intjektion*. *Int. Ztschr. f. Ps.*, XXVII, 1931).

OTTO FENICHEL

The Relation of Humor to Masochism. Lucile Dooley. *Ps. Rev.*, XXVIII, 1941, pp. 37-47.

In this paper the author presents material confirming her 'hypothesis that in humor, as in masochism, the mechanism is an interaction of ego and super-

ego'. Where humor has appeared during analysis 'it occurred when the end of the œdipal period was being worked through'. She comes to the conclusion that a humorous attitude toward life as a character trait is a defense against masochism and sets in when the masochistic reaction threatens to bring about too much pain.

The author feels that 'possibly in the mechanism of humor the ego itself, exclusive of the superego, is split into two parts, the suffering and the liberated child'. This leads her to the conclusion that the 'invulnerability of the ego in the humorous experience, as postulated by Freud, is only partial', and points out that 'when the ego feels itself completely invulnerable it stands alone and there is no humor'. This is the important difference referred to by Freud in comparing the denial of reality in humor, psychosis and ecstasy.

Further observation will be necessary in order to determine whether there are cases in which a humorous attitude exists without underlying masochism.

E. WINDHOLZ

Analytic Reflections on Mixed Marriages. George Little. *Psa. Rev.*, XXIX, 1942, pp. 20-25.

An article which is styled 'Reflections' by the author and is of a heuristic nature might presumably be exempted from the canons of clear thinking and dismissed with passing notice as one man's impressions of a highly complex sociopsychological problem. Unfortunately, however, this article is one of a series put forth as part of the important subject matter entitled *Psychogenetic Studies in Race Psychology*, and it presumes (in the space of six pages) to deal with the following major problems related to miscegenation: 1. The White Man's Concept of the Negro; 2. The Negro's Concept of the White Man; 3. Conditions of Intermarriage; and 4. The Reaction of the Races to Mixed Marriages.

To say that the author deals with these subjects in cavalier fashion is to understate the incredibly sweeping and inexact nature of his many generalizations. Thus, apropos of the white man's concept of the negro, we are told that 'like Freud' the author believes 'that the erecting urge dominates life'. From this beginning we are led through half a page of similes and metaphors (discussed as 'symbols', but not conforming to psychoanalytic definition of that term) to the conclusion that 'negro equals sexual lust, looseness, and virility—in the white man's symbolism'. The negro's concept of the white man is dealt with in a page which tells us, *inter alia*, that 'the negro has a feeling of sexual superiority' . . . because 'his sex urge and prowess have been so widely advertised by his puritanical white superiors', that a 'visitor from . . . Mars . . . would say at once: "The whole world craves the white American woman"'; that 'in the case of the American negro . . . this is true, although many will not admit it . . .'; and that 'the male negro . . . has attained his ideal in marrying a white woman'.

The two concluding sections of the article are, like the first two, full of presumably empirically derived, but actually very loose and prejudiced statements; and this weighty problem with its immense psychological and social implications is practically thrown into the discard in the following concluding 'choice', neither alternative of which the author considers 'at present

remotely possible', viz: '. . . the only solution consists in either the total separation of those designated as white from those designated as colored or the abolition of all racial prejudice'.

MINNA EMCH

On Rotting. Paul Schilder. *Psa. Rev.*, XXIX, 1942, p. 46.

In a short note on the fear of rotting, Schilder points out that, while on a more superficial or preconscious level this is related to castration, on a deeper level it expresses fear concerning the integrity of the inside of the body and is related to getting love by eating, and to pleasure in *fæces* and fear of *fæces*.

He feels that only Melanie Klein, among analytic authors, has given due emphasis to the importance of this fear concerning the integrity of the inside of the body. 'The idea of rotting and losing the inside or the outside of one's body is one of the deepest and most primitive fears.' Schilder gives brief examples from three patients.

GILES W. THOMAS

The Clairpsychism of Strindberg. Paul C. Squires. *Psa. Rev.*, XXIX, 1942, pp. 50-71.

This paper tries to distinguish between the symptoms of Strindberg's paranoid psychosis and 'clairpsychic' phenomena. Strindberg believed in telepathic dreams and gave many examples of them in his autobiographical works and in his fictional writings. Feelings of guilt and expectations of punishment pervade his occult thinking. Telepathic murder through the wish is one of his recurring ideas.

The author presents interesting quotations from Strindberg and descriptions of his psychotic 'clairpsychic' experiences; he does not attempt an analysis or deeper explanation of the phenomena. He concludes by saying, 'If there be individuals who can perceive phenomena beyond the orthodox range of sensitivity, August Strindberg surely was the man ideally adapted by nature for the reception of such parapsychic vibrations'.

HENRY LOWENFELD

A Note About Adam's Apple. Leopold Bellak. *Psa. Rev.*, XXIX, 1942, pp. 300-303.

In mythological stories the adam's apple came from a piece of the forbidden apple which got stuck in Adam's throat. Bellak interprets this myth in two ways: 1. The idea that Eve was impregnated by the forbidden sexual intercourse was displaced onto Adam. 2. The adam's apple is a penis symbol. Adam, having committed a sin with his penis, is punished by getting another prominence on his body.

OTTO FENICHEL

On the Fear of Being Buried Alive. Sandor Feldman. *Psychiatric Quarterly*, XVI, 1942, pp. 641-645.

Feldman explains the common neurotic idea of being buried alive—which he connects with the other common idea of being completely alone in the world—

as a 'fear of not being loved and of being incapable of returning love'. This thesis is exemplified by two cases. 'In other patients, moral discontent with themselves was found to cause this obsessional idea'.

Feldman does not mention the specific problems surrounding this idea, nor the fact that it represents a special case of claustrophobia, nor that the feelings of oppression (which are characteristic of anxiety in general) are probably projected out into the narrow coffin (room) in the outside world.

OTTO FENICHEL

Ward Therapy—A New Method of Group Psychotherapy. Nathan Blackman. *Psychiatric Quarterly*, XVI, 1942, pp. 660-667.

Blackman describes an interesting method of group psychotherapy which uses essentially the same technique as individual psychotherapy. The entire ward population, including nurses and attendants, sits with the therapist and a friendly discussion is gradually started. The therapist begins by explaining the functioning and the purpose of the hospital, its rôle in promoting cures, its interest in understanding mental illnesses and aberrant forms of behavior. Then the difficulties of any one of the members of the group are discussed. The patient is encouraged to present and elaborate on his thoughts about his past and present behavior. The group discusses in detail the behavior of the patient, his life story and the reasons for his illness. The therapist adds his comments. Patients may also suggest topics of interest to them—masturbation, early traumata, the rôle of the parents and the importance of various professions—for discussion in the group, while the therapist acts in the capacity of a moderator. This permits the patient to master an objective approach to his problems instead of losing himself in the all too introspective relationship which usually exists between the patient and the therapist. A setting is provided in which the patient can re-evaluate his concepts and find his problems socially acceptable.

BERNHARD BERLINER

Review of a Year of Group Psychotherapy. Robert Jacobson and Katharine W. Wright. *Psychiatric Quarterly*, XVI, 1942, pp. 744-764.

The authors use a simple test, following the concepts of gestalt psychology: the writing of the alphabet on the blackboard, spontaneously or upon dictation, under varied conditions. The reactions and attitudes of the patient performing the test and his reflections upon the other members of the group afford insight into certain behavior patterns and present opportunities to administer effective treatment on the spot. The situation presents emotional reactions to the group rather than to the person of the therapist. This may promote a subsequent readjustment to society at large. The writers recognize the value of biographical data but it is not considered essential in this approach in which the patients' present functioning and future improvement is considered more important than his past mistakes. This is in contrast, the writers state, to the recommendations of other authors who employ psychoanalytic concepts in group psychotherapy. However, individual interviews and the method described here may well supplement each other.

BERNHARD BERLINER

Schizophrenia Among Primitives. N. J. Demerath. *Amer. J. of Psychiatry*, XCVIII, 1942, pp. 703-707.

Demerath rejects the view that psychogenic aberrations are absent among primitive tribes and the methods of field workers who disagree with him are questioned. However, he goes on to show quite correctly that wherever schizophrenia is frequently present in a 'primitive' group the people in question are not really primitive. To call the work of an anthropologist of C. G. Seligman's standing 'veiled and suspect', as the author does, is at least startling.

GÉZA RÓHEIM

Psychogenic Disorders and the Civilization of the Middle Ages. A. Gallinek. *Amer. J. of Psychiatry*, XCIX, 1942, pp. 42-54.

The symptomatology of hysteria varies with different times and different social environments. Medieval hysteria must be investigated in relation to its cultural background. The medieval world is characterized by Gallinek as a world of marked polarity which resulted in great tension. It was dominated by the polarities of heaven and hell, life and death, evil and good, soul and body, salvation and damnation. Through certain techniques the religious personality tried to reach a state of ecstasy in which hallucinatory phenomena as well as pathological changes of the sensory-motor system occurred. The author calls these techniques 'hysterization'. In order to enter into ecstatic states a radical withdrawal from reality had to be accomplished. A particularly strong masochism seems to have been one of the outstanding features of all medieval religious personalities. The suppressed libidinal urges and fantasies became projected into the outer world. 'In the highest states of ecstasy, Christ, the bridegroom, appeared to the nun, the Virgin Mary to the monk, and thus the phantoms of hell are driven away.' The reward for all these sufferings of hard asceticism seems to have been the feeling of a mystic union with Christ.

Religious personalities with hysterical traits and schizothymic introverted personalities made their impression on the era of the Middle Ages. Neither in modern times nor in antique civilization would such personalities have been considered as great representatives of their time.

GEORGE GEROE

Fundamental Concepts of Psychosomatic Research: Psychogenesis, Conversion, Specificity. Franz Alexander. *Psychosomatic Med.*, V, 1943, pp. 205-210.

The fundamental psychological and physiological differences between conversion symptoms, vegetative neuroses and organic disease are elaborated. A conversion symptom is the symbolic expression of a well-defined complex by the voluntary neuromuscular or sensory perceptive systems whose original function is to relieve emotional tension. The symptoms simultaneously express both the repressed emotion and its rejection. Partial relief is obtained through the pathological part of the symptom.

A vegetative neurosis consists of a psychogenic dysfunction of a vegetative organ which is not under control of the voluntary neuromuscular system.

Such a neurosis (like emotional hypertension) is not an attempt to express an emotion but is the physiological accompaniment of constant or periodically recurring emotional states. The hypertensive patient is under unexpressed emotional tension which is not relieved either through psychoneurotic symptoms or by legitimate expressions of aggression. The latter are inhibited by a neurotic sense of shame or guilt.

The paper starts with a (rather negative and critical) discussion of the term 'psychogenesis' without coming to a definite conclusion about it. At the end, evidence for the specificity of emotional factors is offered.

E. GROTJAHN

Group Psychotherapy. A Review of the Recent Literature. Giles W. Thomas. *Psychosomatic Med.*, V, 1943, pp. 166-180.

Thomas gives an excellently written, complete, evaluating review of literature on group psychotherapy. He subdivides the methods of group psychotherapy into two types: the repressive-inspirational and the analytic. There are also, however, combinations of the two. Both types are effective, but a detailed critical evaluation of the results is as yet impossible.

MARTIN GROTJAHN

Cultural Pressures in the Psychology of Women. Clara Thompson. *Psychiatry*, V, 1942, pp. 331-339.

Psychoanalysis thus far has made extensive acquaintance with the psychology of women in only one type of culture. Facts observed in a particular part of the western world have been interpreted by Freud as an adequate basis for an understanding of female psychology in general and as evidence for a particular theory about specific biological factors in the nature of woman. Inferiority feelings and related characteristics which Freud considered to be specifically female and biologically determined can be explained, according to the author, as developments arising in and growing out of western woman's historic situation of underprivilege, restriction of development, insincere attitudes toward sex, and social and economic dependency. The author's conclusion may be quoted: 'The basic nature of woman is still unknown.'

MARTIN GROTJAHN

Psychobiologic Dynamisms in Behavior: An Experimental Study of Neuroses and Therapy. Jules H. Masserman. *Psychiatry*, V, 1942, pp. 341-347.

A method of animal experimentation is presented by means of which the satisfactions of a primary need can be associated with various sensory symbols and then frustrated or rendered conflictive by controlled experimental means. The results indicate that effective, unequivocal and adequately adaptive behavior patterns leading to the satisfaction of a primary need can readily be established in the cat. These patterns can then be associated with various sensory stimuli or symbols, which thereafter can themselves initiate the behavior responses. Direct mechanical frustration of a consummatory behavior pattern, such as feeding, results in the progressive extinction of the behavior itself and of the 'meaning' of its associated or conditional symbol. Frus-

trations themselves do not give rise to the marked aberrations of conduct produced by intense motivational conflicts. If however the field meanings and motivations are made conflictive and require difficult or incompatible adaptations, the behavior responses become hesitant, indecisive, ineffectual or excessively substitutive, symbolic and regressive. Some of the simple but specific patterns observed in animals under these circumstances correspond to the inhibitions, fixations, phobias, compulsions and other phenomena observed in human psychopathology. Such behavioral aberrations are experimentally accentuated by increasing the intensity of the motivational conflict or by partial constriction of the field of reaction. The 'neurotic' manifestations are diminished under circumstances that tend to decrease the intensity of the motivational conflict, force a successful break-through of inhibitions, or give the animal partial control of the situation. This may also be facilitated by normal behavior in other animals but this phenomenon needs further control observation. The other forms of manipulative resolution of neurotic patterns in animals, nevertheless, seem to have their direct parallels in the techniques employed in human psychotherapy.

MARTIN GROTJAHN

Dissent in the Early History of Psychoanalysis. Edith Vowinckel Weigert. *Psychiatry*, V, 1942, pp. 349-359.

In an extremely clear and thoughtful discussion, Weigert describes the early history of psychoanalysis and its relationship to Adlerian and Jungian psychology. Freud accepted the resentments and hostilities of the Victorian age with calmness and humor. However, the same men who expose themselves to the hostility of the world want the security of agreement in the circle of their closest friends. Although every historic review will recognize the leadership of Freud in the field of psychotherapy because of his pioneering creativity and his comprehensive, revolutionizing ideas, no one is justified in settling into a protective personal devotion to his leadership. Adler's merits are his contributions to ego psychology. By the adherence to conventional morality Adler has conquered the field of pedagogy. While Adler was motivated by socialistic ideals, Jung was influenced by a religious background. Freud esteemed Jung even less than Adler. Edith Vowinckel Weigert sees in Jung an example of tragic ambivalent relationship of the Christian pupil not yet free from racial prejudice, to the Jewish master. Similarly to Reik, Jung considers the neurosis of modern man with its obsessional rituals, its dramatization of symbols and its backward directed dependencies, as a private form of religion. The author feels that in the treatment of psychotics Jung's supporting method of therapy may furnish some useful suggestions.

MARTIN GROTJAHN

A Psychiatric Study of a Man Suffering from a Convulsive Disorder. Leo H. Bartemeier. *Bulletin of The Menninger Clinic*, VII, 1943, No. 2.

Bartemeier states that his clinical experience has led him to believe that cases which we classify as essential epilepsy possess, in addition to the hereditary predisposition, potent acquired factors which are not ordinarily uncovered but which are essential in producing the illness.

His case report deals with a patient who had been under treatment both medically and psychologically for sixteen years. Furthermore, Bartemeier had several interviews with the patient's mother with the result that important material was uncovered which otherwise might not have been. The patient's mother was a masculine personality whose hostility toward her son was manifested by her great fear of doing him injury. The patient in early childhood repressed his oral aggression and developed panic states in situations in which he feared being hurt. Bartemeier feels that by diminishing the patient's anxiety regarding his aggressive impulses the seizures became less frequent. The patient still takes phenobarbital but the intensity and frequency of his attacks have considerably diminished since psychotherapy.

RALPH R. GREENSON

The Problem of Changing Food Habits: With Suggestions for Psychoanalytic Contributions. Margaret Mead. *Bulletin of The Menninger Clinic*, VII, 1943, No. 2.

Margaret Mead is Executive Secretary of the Committee on Food Habits of the National Research Council. In this paper, she points out that although psychoanalytic literature is rich in material on oral and anal attitudes, this material has never been organized to show the specific psychodynamics of the American character structure. She makes the following suggestions for psychoanalytic research which she believes might prove valuable in solving the present day problem of altering American food habits to preserve nutritional standards in the midst of war shortages: (1) An exploration of the development process as patterned by American culture in order to describe and place the period at which eating becomes delibidinized and classified as a superego problem. (2) An exploration of the divisions which are made between food and drink, on the one hand, and between serious meals and 'snacks' on the other. (3) An exploration of the terms with which Americans classify that which is inedible.

In conclusion, Mead remarks: 'Not until psychoanalytic insights into human mechanisms have been specialized into insights into the psychodynamics of an identifiable group of people at a given epoch in history do they become available for social planning'.

RALPH R. GREENSON

The Sociopsychological Significance of Death Among Pomo Indians. B. W. Aginsky. *Amer. Imago*, I, 1940, No. 3, pp. 1 to 11. Comments by George B. Wilbur, pp. 12 to 18.

To the Pomo Indians of Northern California, death or misfortune are never due to natural causes or to chance, but always to hostility or retaliation. The hostile one may be a supernatural creature or another person whom one has wronged or whom one fears. The supernaturals punish for broken taboos. Most of the important aspects of life are hemmed in with taboos involving such things as birth, death, sexual relations, menstruation, hunting, fishing and the weather. Every Pomo is afraid of being the object of sorcery by his own or his family's enemies. He himself has directly or indirectly participated in magic chants to kill these enemies and therefore he expects them to

bring about his death as soon as he becomes ill. As a result at the first sign of an illness the Pomo collapses from anxiety and frequently dies, apparently from these psychological causes. He himself can do nothing to ward off the fatal end but he can be saved by the efforts of his family who engage a sorcerer to counteract the enemy's hostility. Similarly, under certain circumstances a Pomo has a psychological experience which he interprets as meeting a supernatural as a punishment for his having broken a taboo. Again his family can save him through formal remedial measures undertaken by a sorcerer. The astonishing fact is the psychological readiness to die and its apparent profound effect on one's ability to die. At the same time the author points out that the conscious idea of suicide is unknown among these people.

The article is followed by very shrewd and thoughtful comments by George B. Wilbur. We learn that the Pomo Indians are now a small group of two hundred people and that the material in the article is based on statements made by a few aged informers. The younger people of the tribe have lost sympathy and contact with these consorts. Keeping in mind the caution that this should inspire, Wilbur discusses the very interesting parallel between paranoid delusion which is repressed content of the fantasies of individuals in our culture, and these organized social expressions of such repressed fantasies.

It should perhaps be pointed out that the irrational and infantile is evident as well in our own civilization and is expressed in some of our institutions, in certain religious and superstitious practices. The concepts of sin and punishment as well as superstitions regarding illnesses due to the hostility of others are not alien to us. And certain modern modes of social organization depend on the fostering, through terror and persuasion, of these irrational and infantile aspects of man as a demagogic device to get and maintain power.

EMANUEL KLEIN

The Blessing of the Kohenites. S. Feldman. *Amer. Imago*, II, 1941, pp. 296-322. The 'blessing of the Kohenites' in the Jewish ritual is based on Numbers VI: 22-27. The Kohenites, i.e., the members of the priestly caste, ascend a platform and extend their hands towards the community. The face of the Lord is believed to be shining upon Aaron and his descendants, the Kohenites, who bless the children of Israel by putting the name of the Lord upon them. The blessing is done with outstretched hands and extended fingers. Through these extended fingers the Lord himself is supposed to look upon the community like a bridegroom looking at his bride (Cant. II:9). When the Kohenites are giving their blessing they shall not look around in any direction and the people are not supposed to look at the Kohenites. Prohibitions, both Biblical and post-Biblical, clustering around the rite, strongly emphasize the taboo on sex. The author regards the taking off of the shoes by the Kohen as equivalent to circumcision and discusses the castration significance of the *chalitzah* rite (Genesis XXXVIII:8) which absolves a brother of marrying his dead brother's wife. The prohibitions of looking are connected with the 'primal scene'. The author's conjecture that the blessing repeats the scene of Sinai on a small scale is very interesting. The blessing, according to tradition, consisted in pronouncing the name of the divinity while the five fingers are so placed as to form the divine name *Shaday*. Feldman shows that

the finger (and therefore also the divine name) really means the penis. Its 'exhibition' in the blessing is a manifestation of paternal power which the son cannot overcome and it therefore admonishes him to submit to this divine power.

Dr. Feldman's paper gives us a significant insight into the psychological structure of the religion of the ancient Hebrews.

GÉZA RÓHEIM

Marcel Proust. Caroline Wijsenbeek. *Amer. Imago*, II, 1941, pp. 323-346.

The author sets forth the question 'what changed the elegant much sought-after frequenter of Paris "salons" Marcel Proust, into the invalid and self-imposed exile from the world'. The answers to this problem do not emerge very clearly due largely to the lack of organization of the material and to certain stylistic hindrances. Nevertheless, the author's close scrutiny presents many highly illustrative insights into Proust's personality. His writings are quoted extensively and there are references to his life history. The unresolved oedipal situation, the masochistic need for pain and suffering, and the striking ability to translate almost directly primary thinking processes into words, are all clearly demonstrated. There is also a stimulating psychological study of art in general, with special reference to a comparison between music and the literary arts.

RALPH R. GREENSON

The Psychological Interrelations between Alcoholism and Genital Sexuality. Edmund Bergler. *J. of Criminal Psychopathology*, IV, 1942, pp. 1-13.

The tendency toward normal and perverse sexual acts in alcoholic intoxication has been explained by a narcotization of conscience. This is a superficial rationalization which neglects the particular defense mechanisms expressed in the symptomatology, e.g., sexual acts as a disguise for aggression.

The alcoholic regresses to the oral phase. However, as Bergler points out, he does not simply desire, in the form of an unconscious substitution, to get what was once denied him. He is rather set upon revenge for the oral denial, thus attempting to repair and to overcome the trauma of weaning. This 'mechanism of orality' is patterned thus: 1. The oral neurotics unconsciously construct and concoct situations in which they are disappointed. 2. Then, so to speak in self-defense, they throw themselves upon their self-constructed or imaginary enemies with the sharpest aggression. 3. In the final act they revel in self-pity, enjoying masochistic pleasure. The alcoholic unconsciously acts aggressively toward the mother of his own babyhood; he shows her how much she has injured him. Through identification with her, he—out of unconscious revenge—fills her up, as it were, with poison. Misfortunes and blows of fate, brought about by the patient himself, may be real enough, but the patient unconsciously conceives them as maternal punishment which he answers with oral-sadistic regression and masochistic self-pity.

Genital sexuality is usually weak and undeveloped in alcoholics. The coitus of these patients is not an expression of tenderness, it is permeated with aggression against the partner who represents the denying and hated mother.

It is a pseudogenitality employed as a life-affirming defense mechanism against oral murderous fantasies on the one hand and self-destructive masochism on the other.

BERNHARD BERLINER

A Body Image Study of Prostitutes. Frank J. Curran and Matthew Levine. *J. of Criminal Psychopathology*, IV, 1942, pp. 93-117.

Purpose: to determine whether the attitudes of prostitutes towards their bodies differs from that of other women. Method: the Body Image Questionnaire, taken from Schilder's book, *Psychotherapy*, and a psychiatric interview. Material: thirty cases from the Women's Prison Ward at Bellevue Hospital, convicted of prostitution or admitting its practice over months or years, compared with thirty control cases selected among other women prisoners (not psychotic, defective or psychoneurotic) receiving medical or surgical treatment and some alcoholics and reactive depressions (without history of prostitution or epilepsy or severe psychoneurosis). The responses of the two groups are given statistically.

Conclusions: very little difference was revealed in the attitudes of the two groups toward their body image. As Schilder stressed in *The Image and Appearance of the Human Body*, the average person tends to retain his body image and to deny or minimize deviations from the normal even after organic injury.

In contrast, Curran and Frosch found that where excessive attention was given to certain parts of the body, severe personality disorders were present. Since this is not the case with prostitutes, it is suggested that socioeconomic factors seem to be of much greater significance than neurosis in the causation of prostitution. The authors suggest further studies, using this method, of neurotic females, both prostitute and non-prostitute.

DORA FISHBACK

A Case of Necrophilia. Jack Rapaport. *J. of Criminal Psychopathology*, IV, 1942, pp. 277-289.

A man of fifty with infantile features and marked oral trends visited funeral parlors, where he excited himself sexually by looking at female corpses, touching their breasts, and kissing their lips, and finally masturbating. The perversion started in his late thirties when he saw a dead aunt laid out in her casket. This was six years after the death of his foster mother whose dead body, particularly the breasts, first excited him. The author believes that this necrophilia was a reaction to the patient's melancholia after his foster mother's death which had reactivated feelings concerned with the original loss of his own mother. The necrophilia thus represented a mania. It enabled him to express his contempt and disparagement of the former loved object: the object was dead and could not retaliate. It also enabled him to satisfy his craving for new objects and his oral and anal instinctual needs. The perversion, like a manic reaction, served to help the patient to free himself from his objects rather than to succumb to their loss.

BERNHARD BERLINER

Spastic Colon and Instinctual Repression. P. Lionel Goitein and J. Rubin. *J. of Criminal Psychopathology*, IV, 1942, No. 2.

The authors are bent on showing a relationship between the repression of aggression and a spastic colon. For this purpose they used the Schneider Test, Turner Prolonged Standing Test and the Cold Pressor Test as well as some form of psychiatric investigation. Their psychiatric concepts seem to be a conglomeration of Adler, Jung, and Meyer, with a sprinkling of Freud. This article also includes many superficial case histories and a graph of libidinal oscillations.

RALPH R. GREENSON

Disorders in the Body Image in the Clinical Pictures of Psychoses. Gustav Bychowski. *J. of Nervous and Mental Disease*, XCVII, 1943, pp. 310-336.

Since disturbances of the body image can be the result of organic disorders as well as of essentially psychodynamic factors, the principle of twofold genesis can be applied to these phenomena. The author reports histories of depressive or schizophrenic patients, particularly of the involutorial age group, in which a distorted relation of the patient to changes in his own body seem to be the essential pathogenic factor. The disturbance is expressed in hypochondriac delusions and in partial or total depersonalization which result from changes in the cathexis of narcissistic libido. Bychowski compares them with organic disorders like meningitis and cerebral concussion, in which similar symptoms of alteration in the body image determine the psychological manifestations of the illness. Finally, a case of autoscopia is presented: a lonely patient deteriorating in poverty and drunkenness had created the image of a companion, an alter ego. A disintegration of this type in the image of one's own personal past has been made the theme of poetry and it plays a rôle in magic concepts of ghosts and detached souls.

EDITH WEIGERT

The Significance of Body Image for Personality Assay. Ethan Allan Brown and P. Lionel Goitein. *J. of Nervous and Mental Disease*, XCVII, 1943, pp. 401-409.

Drawings of their impressions of their own body images, made by blindfolded persons, were used by Brown and Goitein as a diagnostic method. These drawings were classified in five groups in accordance with Rosanoff's, Kretschmer's and Bleuler's standardization: cycloid, repetoid, schizoid and paranoid types. The drawings of the average person showed a mixture of characteristics from several groups corresponding to personality trends which could be verified in the psychiatric examination. Asthmatic persons were preponderantly cycloid and repetoid; allergic persons and those suffering from atopic eczema were preponderantly in the hysteroid group. The majority of forty children with hay-fever showed hysteroid and repetoid patterns. Assaultive psychopaths showed a preponderant affinity with the cycloid group.

EDITH WEIGERT

The Conditioning of Sexual Behavior by Central Agnosia. Kurt Goldstein and Julius E. Steinfeld. Bulletin of the Forest Sanitarium, I, 1942, No. 2.

This paper is a concentrated summary of the interesting findings which Goldstein and Steinfeld published in 1927 as *Ein Beitrag zur Analyse der Sexualfunktion* in the *Zeitschrift für gesamte Neurologie und Psychiatrie*.

It concerns the disturbances of the sexual function in a patient with a severe brain injury which had made the visual perception of *Gestalten* impossible. He was able among other things to compensate the lack of optical images by his kinesthetic memory. The lack of optical images made it impossible for him to create the introductory stages of sexual excitement. He had to be passively 'seduced' until he could utilize kinesthetic functions with which the continuation of the sexual act then became possible. For the orgasm itself, kinesthetic functions seem to be much more important than visual ones.

OTTO FENICHEL

The Process of Objectivation in Our Attitude Towards Our Fellow Creatures. Edward Weiss. Bulletin of the Forest Sanitarium, I, 1942, No. 2.

It is well known that the perception of reality may be disturbed by a 'repression' of the awareness of one's own characteristics, followed by an ability to see these characteristics in others, as well as by 'projection', which makes one see things in others which one dislikes being aware of in one's self. Weiss stresses the point that a projection is also based on the correct perception of the feelings or moods of other persons by way of 'empathy'. He investigates this 'objectiveness' of one's own attitudes, which makes the understanding of others possible, and inquires into its failure when the relation of a person to his own attitude is disturbed. He explains such 'objectivation' by the example of the understanding of children by adults (everybody was once a child), and of the mutual understanding of the sexes (every man has feminine traits, and every woman masculine ones). The decisive question concerning the correctness of judgments about other persons is not dealt with.

OTTO FENICHEL

Mental Defects in Children. The Nervous Child, II, October 1942.

Edward A. Strecker, the coeditor of this issue, points out that the simpler patterns of the mentally defective child yielded much valuable information for the understanding and interpretation of normal behavior.

Gerald H. J. Pearson reviews the psychopathology. He coordinates Goddard's characterization of feeble-minded persons with Freud's theory of the structure of the mental apparatus, and he concludes that the main defect of the mentally defective person lies in the structure of the ego and—as a special part of it—the superego. Some of the manifest results may be great ambivalence, difficulty of control of aggressive impulses, a disturbed love relationship between child and parents (a vicious circle), feelings of inferiority or lack of self-criticism, or both.

G. Henry Katz, in his article about Re-educational Therapy, states that a greater frequency of emotional disturbances is characteristic of feeble-minded

children, but that the nature of the disturbances themselves does not differ from those in neurotic or even normal children.

The rearing of feeble-minded children in regular homes and schools is frustrating for them. Their parents are usually overanxious or feel guilty and hurt in their narcissism, and their companions are often cruel, supercilious, etc. In this way aggressive outbreaks are provoked which are not counterbalanced by the acceptance and assimilation of ideals, as in normal children. Thus these children are presented with further causes for neurotic reactions. Defective children in general are therefore better off in special boarding schools.

Karl Birnbaum states that the questions of educability, corrigibility and socialization should be taken into account in any characterization of a defective personality. They have to be answered by an understanding of the rôle of primary (constitutional) and secondary (acquired) traits; certainly not all the weight should be put on the intellectual defect alone.

G. P. Carl presents a survey of the rôle of psychometrics in the study of mental deficiency and a very useful evaluation of testing methods and test references.

S. Leopold writes about Juvenile Court Aspects in the Disposition and Care of the Feeble-minded. Forty-three per cent of the juvenile cases of the Neuropsychiatric Division of the Municipal Court (in Philadelphia) were found to be mentally defective; only 40 per cent of the children committed by the court to state institutions were really admitted; 50 per cent of the defective delinquent children were recidivists. The work of the court is handicapped by overcrowded state institutions and restricted admission policies, as well as by the lack of any uniform policy regarding the higher grades of feeble-mindedness.

M. MAHLER-SCHOENBERGER

The Meaning of 'Morale' in Relation to Morale Building and Morale Research.
Isidor Chein. *Psychological Review*, L, 1943, pp. 311-329.

In order to bring some clarification into the research of the morale problem, it is proposed to follow the broad classification of motives that is inherent in Freud's distinction of id, ego and superego systems. For instance, it is important to distinguish aggression as an id motive (the satisfaction of killing) from aggression as an ego motive (killing as a means to a larger end) or as a superego motive (Decatur's 'My country—may she always be right. But, right or wrong—my country'). Id morale is 'good' from a short-sighted point of view, but exceedingly dangerous from a long-sighted one. Narcissistic ego morale is also undependable, because the conditions of self-interest are easily subject to change. The condition of the 'expanded ego morale' ('his pain is my pain') is of a profound and lasting sort. In this way it is hoped to construct a conceptual framework in terms of which the extreme complexity of the morale problem may be grasped and the danger of oversimplification avoided.

E. GROTJAHN

The Theory of the Aggressive Urges and War-Time Behavior. J. F. Brown. *J. of Social Psychology*, XV, 1942, pp. 355-380.

'Fighting . . . is a means to an end, not an end in itself. . . . When men fight, either singly or in groups, this fighting is directed to some goal.' The motives for fighting vary; the most common among adults seem to be security, power, profit, and love objects.

Frustration is one of the most important sources of aggressive behavior and originates in social barriers limiting the freedom of action of the individual. Repressed hostility may become displaced or projected onto secondary goals.

To understand modern war, Brown investigates the nature of social groupings and finds that, in the modern world, those of nations have become dominant. All of us are participating in a race, a nation, a social class, and usually in a religious group. The respective importance of these groups is changing. In the present world, the national differentiation is more decisive than the religious one. In conflicts between nations, there is a tendency to minimize conflicts between various groups within the nation, and to displace the in-group-hostility onto outside groups. A purely psychological tension between organized groups, however, never suffices to create real conflicts. 'Such mechanisms only lead to conflict, however, when the group is organized in terms of some primary interest.'

GEORGE GEROE

Considerations on the Theory and Practice of Psychoanalysis in Our Day. Darcy M. Uchôa. *Revista de Neurologia e Psiquiatria de São Paulo*, VIII, 1942, No. 4.

In this article the author presents a picture of the fundamental aspects of the theory and practice of psychoanalysis, and attempts to bring out the changes in Freud's primary conceptions necessitated by later developments.

The author's study follows two main directions: 1. What psychoanalysis has done for the understanding of human nature and for psychopathology, and what it has contributed to the fields of mental hygiene, education, sociology and anthropology. 2. The influence of psychoanalysis on psychiatry—the decisive increase in modern clinical psychiatric work carried on by practitioners who may accept or reject psychoanalysis, but whose work is in any case really inspired by Freud's approach, who reach the same goal and come to identical conclusions.

D. A. CAMARA

Defense Mechanisms in Neurotic Patients. Durval Marcondes. *Revista de Neurologia e Psiquiatria de São Paulo*, VIII, 1942, No. 4.

The author presents a case treated by psychoanalysis. Before starting the treatment he had previous knowledge of the patient's traumatic experience in early childhood. When, during treatment, the patient's resistance was analyzed, he was able to remember the old trauma perfectly.

The work concludes with some considerations on defense mechanisms in neurotic patients.

D. A. CAMARA

NOTES

THE PHILADELPHIA PSYCHOANALYTIC SOCIETY held its annual meeting on June 3, 1944. The following officers were elected: Gerald H. J. Pearson, M.D., President; George W. Smeltz, M.D., Vice-President; LeRoy M. A. Maeder, M.D., Secretary-Treasurer. The following compose the Educational Committee: Doctors Sydney G. Biddle, Chairman, LeRoy M. A. Maeder, Vice-Chairman, G. Henry Katz, O. Spurgeon English, Lauren H. Smith, and Gerald H. J. Pearson, ex-officio. Dr. Sydney G. Biddle was elected representative to the Executive Council of the American Psychoanalytic Association, and Doctors George W. Smeltz, LeRoy M. A. Maeder and Gerald H. J. Pearson were elected representatives to the Council on Professional Training of the American Psychoanalytic Association.

The NATIONAL COMMITTEE FOR MENTAL HYGIENE announces the establishment of a fund for research in psychosomatic medicine. The purpose is to stimulate and subsidize research in the psychosomatic aspects of the diseases responsible for disability and death. The fund will be directed by Dr. Edward Weiss. Projects will be considered by the following committee: Dr. Charles M. Aldrich, Dr. Franz Alexander, Dr. Stanley Cobb, Lt. Col. William C. Menninger, Dr. John Romano. The fund will be administered under the direction of Dr. George S. Stevenson of the National Committee for Mental Hygiene. Communications should be addressed to Dr. Edward Weiss, 269 So. 19th Street, Philadelphia 3, Pa.

The UNITED STATES CIVIL SERVICE COMMISSION has issued a call for occupational therapists for government hospitals. 'As increasing numbers of injured soldiers return to the hospitals, more and more occupational therapists are needed to aid in their adjustment to normal life. In greatest demand are experienced graduates of accredited occupational therapy schools. Experience should be in hospitals acceptable to the American Medical Association. For some positions, however, college training in psychology and in arts and crafts or trades and industries, or experience as a junior aide in Veterans' hospitals, may be substituted for training in occupational therapy schools. Other positions will be filled by inexperienced graduates of occupational therapy schools. The salary range of these positions is \$1,970 to \$2,433 a year, including overtime pay. Those appointed at \$1,970 will be trainees for a period of eighteen months; those appointed at \$2,190 and \$2,433 will administer occupational therapy under medical and general supervision in Army and Veterans' hospitals. There are no age limits and no written tests. . . . Further information on Occupational Therapy Aide positions and forms for applying can be obtained from first-and second-class post offices or from the United States Civil Service Commission, Washington, 25, D. C.'

The MEDICAL CORRECTIONAL ASSOCIATION, an affiliate of the American Prison Association, held its annual professional and business meeting November 22,

1943. At that meeting a paper was read on The Philosophy of Segregation by Dr. Marion R. King which deals with the classification or admission segregation, the medical, the punitive, and administrative segregation of federal prisoners. Dr. Lawrence Kolb read a paper on The Problem of Alcohol, and Dr. J. D. Reichard of the U. S. P. H. S. on The Marihuana Problem. Dr. Robert V. Seliger spoke on Juvenile Delinquency, Mr. Morris Ploscowe on Some Aspects of the Chronic Sex Offender, and Dr. Gregory Zilboorg on Unconscious Factors in Crime.

The Medical Correctional Association is now engaged in a drive to increase its membership. Dues are one dollar a year, entitling the member to voting privileges, all communications and literature. Those interested can communicate with Robert M. Lindner, Secretary-Treasurer, Medical Correctional Association, Lewisburg, Pennsylvania, for further information.